

QY 1677 CCCCAGTACATCTTCC 1693  
 |||||  
 Db 4 CCGTAAGTACATCTTCC 20

RESULT 1658  
 AAQ56141/c  
 ID AAQ56141 standard; DNA; 21 BP.  
 XX

AC AAQ56141;

XX  
 DT 25-MAR-2003 (revised)  
 DT 08-AUG-1994 (first entry)  
 XX

DE Glucose oxidase secretion plasmid construction primer.

XX  
 KW GOD; enzyme; recombinant; hypoglycosylated; *Aspergillus niger*; yeast;  
 expression; *Saccharomyces cerevisiae*; ss.  
 XX

OS Synthetic.

XX DE4301904-A1.

XX 10-FEB-1994.

XX 25-JAN-1993; 93DE-04301904.

XX 07-AUG-1992; 92DE-04226095.

XX (BOEF) BOEHRINGER MANNHEIM GMBH.

XX Kopetzki E, Lehnert K;

XX WPI; 1994-049396/07.

XX  
 PT New hypoglycosylated recombinant glucose oxidase - produced by expressing  
 PT *Aspergillus* GOD gene in yeast mutant with N-glycosylation defect.  
 XX

PS Example 1; Page 7; 27pp; German.

XX  
 CC The sequence is that of a primer which was used in the construction of a  
 CC plasmid for the secretion of *Aspergillus niger* glucose oxidase (GOD) in  
 CC *Saccharomyces cerevisiae*. (Updated on 25-MAR-2003 to correct PN field.)  
 XX

SQ Sequence 21 BP; 7 A; 10 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred.No.1,le+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 225 TGAGAGTGTGTGTGTG 241  
 |||||  
 Db 20 TGTCAAGTGTGTGTGTG 4

RESULT 1659

AAQ57082/c  
 ID AAQ57082 standard; DNA; 21 BP.  
 XX

AC AAQ57082;

XX 25-MAR-2003 (revised)

DT 22-JUL-1994 (first entry)

XX Plasmid YEPL/GOD-(His)4 construction primer.

XX Amplification; secretion; plasmid; construction; glucose oxidase; ss.

OS Synthetic.

XX EP582244-A2.

PD 09-FEB-1994.  
 XX  
 PF 02-AUG-1993; 93EP-00112338.  
 XX

PR 07-AUG-1992; 92DE-04226094.  
 PR 25-JAN-1993; 93DE-04301932.

XX (BOEF) BOEHRINGER MANNHEIM GMBH.  
 PA (HOF) ROCHE DIAGNOSTICS GMBH.  
 XX

PI Lehle L, Lehnert K, Kopetzki E;

XX WPI; 1994-044288/06.

XX  
 PT Yeast mutants with N-glycosylation defects - for prodn. of hypo-  
 PT glycosylated proteins, including recombinant proteins.  
 XX

PS Example 1; Page 11; 31pp; German.

XX  
 CC The sequence is that of a PCR primer which was used in the construction  
 CC of plasmid YEPL/GOD-(His)4 as part of the construction of plasmids for  
 CC the secretion of A. niger glucose oxidase (GOD) in S. cerevisiae.  
 CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to  
 CC correct PA field.)  
 XX

SQ Sequence 21 BP; 7 A; 10 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred.No.1,le+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 225 TGAGAGTGTGTGTGTG 241  
 |||||  
 Db 20 TGTCAAGTGTGTGTGTG 4

RESULT 1660

AAT10818  
 ID AAT10818 standard; DNA; 21 BP.  
 XX

AC AAT10818;

XX 25-MAR-2003 (revised)

DT 10-APR-1996 (first entry)

XX Human papilloma virus 6 specific oligonucleotide probe MY12.

XX  
 KW Human papilloma virus; probe; detection; diagnosis; genital; oral;  
 KW carcinomas; research; typing; HPV6; specific; MY12; ss.  
 XX

OS Synthetic.

XX US547839-A.

XX 05-SEP-1995.

XX 20-APR-1993; 93US-00050743.

XX 09-SEP-1988; 88US-00243486.

PR 10-MAR-1989; 89US-00322550.

PR 09-SEP-1989; 89WO-US003747.

XX 14-NOV-1990; 90US-00613142.

XX (HOF) HOFFMANN LA ROCHE INC.

XX Tling Y, Resnick RM, Greer CE, Manos MM, Bauer HM;

XX WPI; 1995-319884/41.

XX  
 PT Detection of human papilloma virus DNA by amplification - using specific  
 PT consensus primer pairs and pref. detection with genetic or type specific  
 PT probes for use in research and diagnosis.  
 XX

PS Claim 3; Col 15-16; 36pp; English.  
XX  
XX The human papilloma virus (HPV) specific probes AAT10818-T10839 are used  
CC to detect, or type HPV for research or diagnostic purposes, e.g. to  
CC identify HPV that are implicated in genital or oral carcinomas. (Updated  
CC on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1677 CCCCACCTACATCTTCC 1693  
DB 4 CCGTAACCTACATCTTCC 20  
RESULT 1661  
AAT00342/C  
ID AAT00342 standard; DNA; 21 BP.  
XX  
XX AAT00342;  
AC  
XX 14-AUG-1996 (first entry)  
DT  
XX  
XX Family 2 bFGF DNA consensus ligand (experiment 3).  
DE  
XX  
XX Family 1; family 2; ligand; thrombin;  
KW systematic evolution of ligands by exponential enrichment; SLEEX;  
KM heparin; selection; region of homology; inhibitor; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX MO9521853-AI.  
PN  
XX  
XX 17-AUG-1995.  
PD  
XX  
XX 06-FEB-1995; 95WO-US001458.  
PF  
XX  
XX 10-FEB-1994; 94US-00195005.  
PR 28-MAR-1994; 94US-00219012.  
XX  
XX (NEXS-) NEXSTAR PHARM INC.  
PA  
XX  
XX Janjic N, Gold L, Tasset D;  
PI  
XX  
XX WPI; 1995-293073/38.  
DR  
XX  
XX Identification of ligands to basic fibroblast growth factor and thrombin  
PT - which can be modified for increased in vivo stability.  
PS  
XX  
XX Claim 21; Page 106; 236pp; English.  
XX  
XX The sequences given in AAT00282-394 represent DNA ligands to basic  
CC fibroblast growth factor (bFGF). These sequences were isolated using the  
CC primers and target regions given in AAG98421-29 using systematic  
CC evolution of ligands by exponential enrichment (SLEEX). DNA templates  
CC containing a region of 30 or 40 random nucleotides flanked by constant  
CC sequence regions, were synthesized. The constant regions were designed to  
CC be amplified by the primers. The primer 3p7.1ps has 2 biotin  
CC phosphoramidites and two additional A residues covalently attached to its  
CC 5' terminus during synthesis. The random region was generated by  
CC utilizing an equimolar mixture of the four nucleotides during oligo-  
CC internal random regions. Three pools of ssDNA were created that contain  
CC internal random regions. Each pool was incubated with bFGF at an excess  
CC of DNA to target. DNA bound to bFGF were selected by filtration. The  
CC selected single stranded DNA (ssDNA) was then amplified by PCR. A  
CC significant improvement in affinity of DNA ligands was seen after 10  
CC rounds of selection. Five distinct families of ssDNA were identified,  
CC based on regions of homology. Some sequences showed no obvious homology  
CC to the five families and are considered to be orphans  
XX

SQ Sequence 21 BP; 3 A; 4 C; 5 G; 2 T; 0 U; 7 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 57.1%; Pred. No. 1.1e+03;  
Matches 12; Conservative 6; Mismatches 3; Indels 0; Gaps 0;  
QY 84 CCGCGGCTCTGAGGTGCTCG 104  
DB 21 CYGGGCGCTRAARAYTCCTCG 1  
RESULT 1662  
ADG76459/C  
ID ADG76459 standard; DNA; 21 BP.  
XX  
XX ADG76459;  
AC  
XX 11-MAR-2004 (first entry)  
DT  
XX  
XX Human leukocyte antigen HLA-A exon 2 probe #15.  
DE  
XX  
XX Human; ss; Human leukocyte antigen; HLA-A; probe; genotyping;  
KW tissue typing; transplantation; graft-versus-host disease.  
XX  
XX Homo sapiens.  
OS  
XX  
XX US5451512-A.  
PN  
XX  
XX 19-SEP-1995.  
PD  
XX  
XX 28-SEP-1993; 93US-00127954.  
PF  
XX  
XX 05-NOV-1991; 91US-00788113.  
PR  
XX  
XX (HOFF) HOFFMANN IA ROCHE INC.  
PA  
XX  
XX Apple RJ, Bugawan TL, Erlich HA;  
PI  
XX  
XX WPI; 1995-336258/43.  
DR  
XX  
XX New oligo:nucleotide primers for HLA-A locus typing - used for typing  
PT tissue for e.g. transplantation(s) and identifying individuals or disease  
PT susceptibility.  
XX  
XX  
XX Disclosure; SEQ ID NO 15; 80pp; English.  
XX  
XX The invention relates to a pair of oligonucleotide (ON) primers for  
CC amplifying the exon 1-2 region of the HLA-A locus (human leukocyte  
CC antigen A), where the pair of primers consists of ONE, RAPI007 and DB337  
CC (appearing as ADG76495 and ADG76496). Also included is a method for  
CC amplifying a region of the HLA-A locus containing the first and second  
CC exons, which consists of carrying out a PCR using the above primers. Also  
CC disclosed are HLA-A genotyping probes for exon 2 and 3 and HLA-A allele  
CC DNA/protein sequences. The method is used for typing HLA Class I A locus  
CC nucleic acids for typing tissue for transplantation, determining  
CC individual identity and identifying disease susceptible individuals e.g.  
CC graft-versus-host disease. The method provides a rapid and precise system  
CC for genotyping the alleles of the HLA-A locus, including those that  
CC cannot be distinguished by serological methods. The present sequence is  
CC an HLA-A genotyping probe of the invention. Note: The disclosure states  
CC that the primers amplify exons 2 and 3, not 1 and 2 as stated in the  
CC claims.  
XX  
SQ Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1239 CTTGATCTTCGATCTCT 1255  
DB 18 CTTGATCTTCGATCTCT 2



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RESULT 1663
AAT35284/C
ID AAT35284 standard; DNA; 21 BP.
XX
AC AAT35284;
XX
DT 09-DEC-1996 (first entry)
XX
DE Chemokine receptor K5.5 primer K5-5B (antisense).
XX
KM Chemokine receptor K5.5; MIP-1-alpha; RANTES; MCP-1; allergy; atheroma;
KM HIV; AIDS; graft rejection; stem cell; primer; ss.
XX
OS Synthetic.
XX
PN MO9623068-A1.
XX
PD 01-AUG-1996.
XX
PF 24-JAN-1996; 96MO-GB000143.
XX
PR 27-JUN-1995; 95GB-00001683.
XX
PA (GLAXO) GLAXO GROUP LTD.
XX
PI Wells TNC, Power CA;
XX
DR WPI; 1996-362692/36.
XX
PT Chemokine receptor which binds MIP-1-alpha, RANTES and/or MCP-1 - useful
PT in screening for agents to treat asthma, hay fever, eczema, allergies,
PT atopic dermatitis, rhinitis or conjunctivitis.
XX
PS Example; Fig 2; 47pp; English.
XX
CC A set of internal sequencing primers (AAT35281-91) were used to sequence
CC cDNA clone E1-C19 (see also AAT35277), which codes for chemokine receptor
CC K5.5 (AAR99274). They were designed on the basis of previous sequencing
CC results
XX
SQ Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 754 GAAGTGTCCCTGCTCAA 770
Db 19 GATGTGTACTGCTCAA 3

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RESULT 1664
AAT44762
ID AAT44762 standard; DNA; 21 BP.
XX
AC AAT44762;
XX
DT 25-MAR-2003 (revised)
DT 29-JAN-1997 (first entry)
XX
DE HPV typing probe MY12 for use with LI consensus primers.
XX
KM Probe; primer; PCR; polymerase chain reaction; amplification;
KM human papillomavirus; consensus; ss.
XX
OS Synthetic.
XX
PN US5527898-A.
XX
PD 18-JUN-1996.
XX
PF 07-JUN-1995; 95US-00474542.

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XX
PR 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 09-SEP-1989; 89MO-US003747.
PR 14-NOV-1990; 90US-00613142.
PR 20-APR-1993; 93US-00050743.
PR 24-SEP-1993; 93US-00126452.
XX
PA (HOFF) HOFFMANN LA ROCHE INC.
XX
PI Bauer HM, Resnick RM, Greer CE, Manos MM, Zhang TY, Gravitt PE;
XX WPI; 1996-299903/30.
XX
DR Nucleic acid hybridisation probes - specific for selected human papilloma
XX virus types.
XX
PT Disclosure; Col 31-32; 96pp; English.
XX
PS
XX
CC The invention relates to new oligonucleotide probes and primers used for
CC the detection of human papillomaviruses (HPV) which are not genital types
CC 6, 11, 16, 18 or 33. The probes and primers AAT44608-T44693 are esp. used
CC to detect HPV types 26, 31, 31B, 35, 39, 40, 43, 45, 51-59 and 68. The
CC consensus primers and typing probes AAT44733-T44906, which are based on
CC and amplify fragments of the L1, E6, E7 and E1 regions of the HPV
CC sequences. Detection of the amplification products is done with probes
CC derived from consensus sequences found in all characterised HPV
CC sequences. Probes AAT44762-810 are examples of HPV typing probes for
CC identifying the amplified products generated by LI consensus primers.
CC This sequence is a sense probe which has specificity for HPV6 and binds
CC to the HPV genome at position 6813. (Updated on 25-MAR-2003 to correct PF
CC field.)
XX
SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1677 CCCCACCTACATCTTCC 1693
Db 4 CCGTAACCTACATCTTCC 20

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RESULT 1665
AAT78006
ID AAT78006 standard; DNA; 21 BP.
XX
AC AAT78006;
XX
DT 25-MAR-2003 (revised)
DT 07-OCT-1997 (first entry)
XX
DE Human papillomavirus 6 specific typing probe MY12.
XX
KM Human; papillomavirus 6; HPV6; typing probe; detection; ss.
XX
OS Synthetic.
XX
PN US5639871-A.
XX
PD 17-JUN-1997.
XX
PF 01-JUN-1995; 95US-00457648.
XX
PR 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 29-AUG-1989; 89MO-US003747.
PR 14-NOV-1990; 90US-00613142.
PR 20-APR-1993; 93US-00050743.
PR 24-SEP-1993; 93US-00126452.
XX

```

PA (HOFF) ROCHE MOLECULAR SYSTEMS INC.  
 XX Imprim CC, Manos MM, Bauer HM, Zhang TY, Greer CE, Resnick RM,  
 PI Gravit PE;  
 XX WPI; 1997-332084/30.  
 DR  
 XX New oligo:nucleotide probes for human papilloma-virus - used for  
 PT detecting and typing HPV and for detecting previously unknown HPV types  
 PT and subtypes.  
 XX  
 PS Disclosure; Col 115-116; 94pp; English.  
 XX  
 CC The present sequence is a human papillomavirus 6 (HPV6) specific typing  
 CC probe. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-  
 CC 2003 to correct PR field.)  
 XX  
 SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1677 CCCCACCTACATCTTCC 1693  
 DB 4 CCGTAACTACATCTTCC 20  
 RESULT 1666  
 AAV27016  
 ID AAV27016 standard; DNA; 21 BP.  
 XX  
 AC AAV27016;  
 XX  
 DT 11-SEP-1998 (first entry)  
 XX  
 DE Homo sapiens gp-Fy PCR primer.  
 XX  
 XX gp-Fy protein; Fyb71-81; duffy blood group; antigen; alpha; beta;  
 KM alternative splicing; RBC; red blood cell; malaria; treatment;  
 KM PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN MO9821224-A1.  
 XX  
 PD 22-MAY-1998.  
 XX  
 PF 14-NOV-1997; 97WO-US021067.  
 XX  
 PR 15-NOV-1996; 96US-00749543.  
 XX  
 XX (NYBL-) NEW YORK BLOOD CENT INC.  
 PA  
 PI Pogo OA, Chaudhuri A;  
 XX  
 DR WPI; 1998-297854/26.  
 XX  
 PT Nucleic acid encoding gp-Fy, Duffy antigen proteins - used to prevent  
 PT vivax malaria and to regulate erythrocyte, neural or renal function.  
 XX  
 PS Claim 17; Page 32; 87pp; English.  
 XX  
 CC The sequence is that of a PCR primer p2as which was used in the isolation  
 CC of DNA encoding a major subunit of the Duffy blood group antigenic  
 CC system, the gp-Fy proteins. The gp-Fy proteins are gp-Fy alpha and gp-Fy  
 CC beta which are produced from the same gene via a mRNA splicing mechanism.  
 CC It contains the major receptor by which Plasmodium vivax enters red blood  
 CC cells (RBC) and causes malaria. The proteins are thus useful in  
 CC preventing malaria and in regulating RBC, renal and neural function. The  
 CC protein or certain fragments of it, may also be used to generate  
 CC antibodies, complementary peptides and drugs modelled on their tertiary

CC structure, useful in the same way  
 XX  
 SQ Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1146 TCAGATTGACATGTGGG 1162  
 DB 1 TCAGGTTCACAGGTGGG 17  
 RESULT 1667  
 AAV17380  
 ID AAV17380 standard; DNA; 21 BP.  
 XX  
 AC AAV17380;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 04-JUN-1998 (first entry)  
 XX  
 DE Probe MY12 for human papillomavirus typing.  
 XX  
 XX Human papillomavirus; HPV; HPV detection; HPV typing;  
 KM L1 type-specific probe; ss.  
 XX  
 OS Synthetic.  
 OS Human papillomavirus.  
 XX  
 PN US5705627-A.  
 XX  
 PD 06-JAN-1998.  
 XX  
 PF 26-MAY-1995; 95US-00452055.  
 XX  
 PR 09-SEP-1988; 88US-00243486.  
 PR 10-MAR-1989; 89US-00322550.  
 PR 14-NOV-1990; 90US-00613142.  
 PR 20-APR-1993; 93US-00050743.  
 XX  
 XX (HOFF) ROCHE MOLECULAR SYSTEMS INC.  
 PA  
 PI ting Y, Resnick RM, Greer CE, Bauer HM, Manos MM;  
 XX  
 DR WPI; 1998-192210/17.  
 XX  
 XX Human papilloma probes and primers - useful for, e.g. detecting and  
 PT typing of human papilloma viruses.  
 XX  
 PS Claim 1; Col 15-16; 37pp; English.  
 XX  
 CC This sequence represents a human papillomavirus (HPV) L1 type-specific  
 CC probe of the invention. This sequence may be used in conjunction with L1  
 CC specific primers for detecting and typing HPV. Identification and typing  
 CC of HPV is important as different types of HPV pose different risks for  
 CC infected individuals. HPV6 and HPV18 have been more consistently  
 CC identified in higher grades of cervical dysplasia and carcinoma than  
 CC other HPV types. (Updated on 25-MAR-2003 to correct PR field.)  
 XX  
 SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1677 CCCCACCTACATCTTCC 1693  
 DB 4 CCGTAACTACATCTTCC 20  
 RESULT 1668  
 AAV38524

ID AAV38524 standard; DNA; 21 BP.  
XX AAV38524;  
AC  
XX  
XX  
DT 08-OCT-1998 (first entry)  
XX  
XX  
DE PCR primer for prostate specific antigen.  
XX  
XX DNA marker; metastatic prostate cancer; human; detection; PCR primer;  
KW disease marker identification; lupus erythematosus; rheumatoid arthritis;  
KW multiple sclerosis; asthma; myasthenia gravis; autoimmune thyroiditis;  
KW amyloid lateral sclerosis; interstitial cystitis; prostatitis;  
KW prostate specific antigen; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX W09824935-A1.  
XX  
XX 11-JUN-1998.  
XX  
XX 05-DEC-1997; 97WO-US022105.  
XX  
XX 06-DEC-1996; 96US-0032619P.  
XX 12-DEC-1996; 96US-0032701P.  
XX 24-MAR-1997; 97US-0041576P.  
XX  
XX (UROC-) UROCOR INC.  
XX  
XX Ralph D, An G, Ohara M, Veltri R;  
XX  
XX WPI; 1998-333350/29.  
XX  
XX  
XX Identifying markers for disease states - by amplifying RNA from  
PT peripheral blood and identifying RNA which is differential expressed  
PT between normal and disease state subjects.  
XX  
XX  
XX Example 6; Page 98; 158pp; English.  
XX  
XX This sequence is a PCR primer for the gene encoding the prostate specific  
CC antigen, and were used in the method of the invention. The method is for  
CC identifying markers for a disease state, and comprises: (a) providing a  
CC first set of peripheral blood mRNAs from one or more subjects known to  
CC exhibit the disease state and a second set of peripheral blood mRNAs from  
CC one or more normal subjects; (b) amplifying both sets of mRNAs to provide  
CC nucleic acid amplification products; (c) comparing the sets of  
CC amplification products; and (d) identifying those mRNAs that are  
CC differentially expressed between normal subjects and subjects exhibiting  
CC the disease state; where a difference in quantity of expression of an  
CC mRNA is indicative of a disease marker. The identified marker sequence  
CC can be used in a method of detecting a metastatic cancer disease state,  
CC especially for detection of prostate cancer. Using the methods, a disease  
CC state may be detected, diagnosed, or a prognosis may be delivered by  
CC examining a blood sample rather than relying on a more invasive, or less  
CC sensitive test. In addition, a subject may be monitored for disease  
CC progression, status and response to therapies through monitoring of  
CC differentially expressed disease markers. The methods can be used for  
CC diseases such as cancer (especially metastatic or prostate cancer),  
CC asthma, lupus erythematosus, rheumatoid arthritis, multiple sclerosis,  
CC myasthenia gravis, autoimmune thyroiditis, amyloid lateral sclerosis,  
CC interstitial cystitis, prostatitis or other systemic or chronic conditions  
XX  
XX  
SQ Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1461 CCTCAGCTGGGGAGC 1477  
DB 2 CCTCAGCTGGGGAGC 18

RESULT 1669  
AAV40603  
ID AAV40603 standard; DNA; 21 BP.  
XX  
XX  
XX  
AC AAV40603;  
XX  
XX  
DT 21-DEC-1998 (first entry)  
XX  
XX  
DE Human TSC gene exon 19 forward primer hTSCex19.  
XX  
XX Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human;  
KW ion transport; Gitelman's syndrome; Bartter's syndrome;  
KW hypokalaemic alkalosis; hypocalciuria; hypomagnesemia; diagnosis;  
KW therapy; SSCP; primer; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX W09829431-A1.  
XX  
XX 09-JUL-1998.  
XX  
XX 19-DEC-1997; 97WO-US023553.  
XX 31-DEC-1996; 96US-00778052.  
XX  
XX (UYVA ) UNIV YALE.  
XX  
XX Lifton RP, Simon DB;  
XX  
XX WPI; 1998-388029/33.  
XX  
XX  
XX Thiazide sensitive cotransporter and ATP sensitive potassium channel  
PT genes - useful for developing products for the diagnosis and treatment of  
PT ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.  
XX  
XX  
XX Example 1; Page 51; 105pp; English.  
XX  
XX Primers hTSCex19 forward and reverse (see AAV40603 and AAV40604,  
CC respectively) are designed to amplify exon 19 of the human hTSC gene (see  
CC AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see  
CC AAV40682). Both primers are located within introns of hTSC. 27 sets of  
CC specific primers (see AAV40565-V40618) were used for SSCP analysis of  
CC hTSC. Amplified products were analysed for molecular variants by  
CC electrophoresis, and identified variants were sequenced. Complete linkage  
CC of Gitelman's syndrome with TSC was demonstrated. Identification of the  
CC molecular basis of Gitelman's syndrome allows for the genetic diagnosis  
CC of this disorder. The invention provides products and methods useful for  
CC diagnosis and treatment of Gitelman's syndrome and other ion transport  
CC disorders  
XX  
XX  
SQ Sequence 21 BP; 5 A; 7 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 516 GGAGAGCTGACCTCA 532  
DB 1 GGAGAGCTGACCTCA 17  
RESULT 1670  
AAZ25918/c  
ID AAZ25918 standard; DNA; 21 BP.  
XX  
XX  
XX  
AC AAZ25918;  
XX  
XX  
DT 30-NOV-1999 (first entry)  
XX  
XX  
DE Human polymorphic region 107.  
XX  
XX  
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;

KW cell viability; loss of heterozygosity; precancerous condition; ASi;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
KW graft versus host disease; malignant cell removal; bone marrow; ss.  
XX  
OS Homo sapiens.  
XX  
PN M09841648-A2.  
XX  
PD 24-SEP-1998.  
XX  
PF 19-MAR-1998; 98WO-US005419.  
XX  
PR 20-MAR-1997; 97US-0041057P.  
XX  
PA (VARI-) VARIAGENICS INC.  
XX  
PI Housman D, Ledley FD, Stanton VP;  
XX  
DR WPI; 1998-521232/44.  
XX  
PT Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.  
XX  
PS Example 14; Fig 1; 605pp; English.  
XX  
CC This invention describes a novel method for identifying an inhibitor  
CC potentially useful for treatment of cancer, where the inhibitor is active  
CC on a gene vital for cell growth or viability, and where the gene is  
CC on a gene vital for cell growth or viability (LOH) in a cancer. The inhibitor is  
CC used for preventing the development of cancer in a patient having a  
CC precancerous condition, by administering to the patient a first allele  
CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
CC present in cells of the precancerous condition, where the normal somatic  
CC cells of the patient are heterozygous for the first gene, the inhibitor  
CC is active on at least one but less than all allelic forms of the gene  
CC present in a population and targets only one allelic form present in the  
CC normal somatic cells, and the first gene. The products and methods can be  
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
CC graft versus host disease. The method can also be used to remove  
CC malignant cells from bone marrow transplants. AA235812-226825 represent  
CC human polymorphic sites described in the method of the invention  
XX  
SQ Sequence 21 BP; 2 A; 5 C; 10 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 741 CACCGCATCCGGAG 757  
DB 19 CACCGCATCCGGAG 3  
RESULT 1671  
AA230746  
ID AA230746 standard; DNA; 21 BP.  
XX  
AC AA230746;  
XX  
DT 19-JAN-2000 (first entry)  
XX  
DE Human prostate specific antigen PCR primer #15.  
XX  
KW Prostate specific antigen; DNaseI; marker; expression; diagnosis;  
KW differential; disease; cancer; metastatic; breast cancer; prostate;  
KW peripheral leukocyte; immune response; asthma; lupus erythematosus;  
KW rheumatoid arthritis; multiple sclerosis; myasthenia gravis;  
KW autoimmune thyroiditis; amyotrophic lateral sclerosis; ALS;

KW interstitial cystitis; prostatitis; mRNA; PCR; reverse transcriptase-PCR;  
KW RT-PCR; screening; early; diagnosis; prognosis; monitoring; primer; ss.  
XX  
OS Synthetic.  
XX  
OS Homo sapiens.  
XX  
PN M09949083-A1.  
XX  
PD 30-SEP-1999.  
XX  
PF 24-MAR-1999; 99WO-US006488.  
XX  
PR 24-MAR-1998; 98US-00046894.  
XX  
PA (UROCC-) UROCCOR INC.  
XX  
PI Ralph D, An G, O'hara SM, Veltri RW;  
XX  
DR WPI; 1999-591105/50.  
XX  
PT Identifying markers of human disease, specifically for diagnosis of  
PT metastatic prostatic and breast cancers.  
XX  
PS Disclosure; Page 101, 225pp; English.  
XX  
CC This sequence represents human prostate specific antigen (PSA) PCR primer  
CC #15, used with PCR primer #16 (AA230747) in experiments to confirm  
CC whether a sample of total cell RNA treated with DNaseI is completely free  
CC of DNA. If contaminating DNA is present, these primers will amplify a PCR  
CC product, which can be visualised via agarose gel electrophoresis. Once  
CC DNA has been completely removed from total cell RNA, the RNA can be used  
CC as a template for relative quantitative reverse transcriptase-PCR (RT-PCR)  
CC amplification of novel markers of human disease (AA230713-230719). These  
CC markers are differentially expressed in peripheral leukocytes between  
CC healthy subjects and patients with metastatic cancers (especially those  
CC of the prostate or breast). Detecting levels of such human disease  
CC markers is used for diagnosis (also prognosis and monitoring) of  
CC diseases, including metastatic or organ-confined cancers, and diseases  
CC which also elicit an immune response such as asthma, lupus erythematosus,  
CC rheumatoid arthritis, multiple sclerosis, myasthenia gravis, autoimmune  
CC thyroiditis, amyotrophic lateral sclerosis (ALS), interstitial cystitis  
CC and prostatitis, but especially metastatic prostatic cancer and benign  
CC particular use is differentiating between prostatic cancer and benign  
CC cancer, by multivariate analysis of several antisense to sequences that  
CC can be treated by administering sequences antisense to sequences that  
CC encode human disease markers. The method detects a leukocyte response to  
CC disease rather than products of diseased subjects. Disease can be detected at an  
CC early stage, when few, if any, diseased cells are present in the  
CC circulation. Analysis of blood samples eliminates the need for more  
CC invasive methods for obtaining samples  
XX  
SQ Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1461 CCTCAGTCTGGGGAGC 1477  
DB 2 CCTCAGTCTGGGGAGC 18  
RESULT 1672  
AA278886  
ID AA278886 standard; DNA; 21 BP.  
XX  
AC AA278886;  
XX  
DT 08-SEP-1999 (first entry)  
XX  
DE Human plasminogen PCR primer plg+289.

```
XX Tissue factor; human; thrombogenic; substructure; thrombose; tumour;
KM vascular malformation; vascular endothelium; plasminogen; PCR primer;
KM ss.
XX
XX Homo sapiens.
XX
XX MO9932143-A1.
XX
XX 01-UTL-1999.
XX
XX 22-DEC-1998; 98WO-US027498.
XX
XX 23-DEC-1997; 97US-00996744.
XX
XX (NUVA-) NUVAS LLC.
XX
XX Houston LL, Dickinson CD;
XX
XX WPI; 1999-405116/34.
XX
XX New thrombogenic polypeptides used to, e.g. obliterate vasculative
XX malformations.
XX
XX Example 8; Page 81; 97pp; English.
XX
XX This invention describes novel thrombogenic polypeptides which comprise a
XX thrombogenic substructure and a context-dependent entity which recognizes
XX desired biologically susceptible sites, e.g. tumour vascular endothelium.
XX A novel context-dependent functional entity comprises a substructure with
XX thrombogenic potential and one or more context-enhancing substructures
XX having the ability to recognize desired biologically susceptible sites,
XX where the entity imparts thrombogenic activity when positioned in the
XX function-forming context at the biologically susceptible sites, and the
XX entity has no thrombogenic activity absent a function-forming context at
XX the biologically susceptible sites. The context-dependent functional
XX entities impart thrombogenic activity only at biologically susceptible
XX sites. They can be used to obliterate vasculative malformations or to
XX selectively thrombose the vasculature of solid tumours. This sequence
XX represents a human plasminogen PCR primer used in the method of the
XX invention
XX
XX Sequence 21 BP; 5 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 874 CTGATGACTGTGGAA 890
DB 4 CTGATGACTGTGGAA 20
RESULT 1673
AAC69272/c
ID AAC69272 standard; DNA; 21 BP.
XX
XX AAC69272;
XX
XX 29-JAN-2001 (first entry)
XX
XX Human ABC1 gene exon 7 fragment corrected sequence, SEQ ID NO:171.
XX
XX Human ABC1 cholesterol transporter; chromosome 9q31;
XX ATP-binding cassette; HDL deficiency disorder; high density lipoprotein;
XX Tangier disease; TD; familial HDL deficiency; FHA; polymorphism;
XX cardiovascular disease; coronary artery disease; coronary restenosis;
XX cerebrovascular disease; peripheral vascular disease;
XX Alzheimer's disease; Niemann-Pick disease; Huntington's disease;
XX X-linked adrenoleukodystrophy; cancer; gene therapy; genetic diagnosis;
XX prognosis; prophylaxis; drug screening; transgenic animal; ds.
XX
XX Homo sapiens.
OS
```

```
XX
XX MO200055318-A2.
XX
XX 21-SEP-2000.
XX
XX 15-MAR-2000; 2000MO-IB000532.
XX
XX 15-MAR-1999; 99US-0124702P.
XX
XX 08-JUN-1999; 99US-0138048P.
XX
XX 17-JUN-1999; 99US-0139600P.
XX
XX 01-SEP-1999; 99US-0151977P.
XX
XX (UYBR-) UNIV BRITISH COLUMBIA.
XX (XENO-) XENON BIORESEARCH INC.
XX
XX Hayden MR, Wilson AR, Pimstone SN;
XX
XX WPI; 2000-587528/55.
XX
XX New ABC1 polypeptide is useful for treating diseases associated with ABC1
XX biological activity, e.g. Alzheimer's disease, Huntington's disease and
XX cancer.
XX
XX Example; Fig 11; 229pp; English.
XX
XX The invention relates to the human ABC1 cholesterol transporter protein
XX (B3082) and to nucleic acid sequences (C69120) which encode it. ABC1 is
XX a member of the ATP-binding cassette (ABC transporter) superfamily of
XX proteins, and plays a crucial role in cholesterol transport, particularly
XX intracellular cholesterol trafficking in monocytes and fibroblasts, being
XX involved in cholesterol efflux from the cell. The gene encoding ABC1 is
XX located on chromosome 9q31, and mutations in this gene are associated
XX with two genetic HDL (high density lipoprotein) deficiency disorders,
XX Tangier disease (TD) and familial HDL deficiency (FHA). These diseases
XX are distinguishable in that TD is an autosomal recessive disorder, while
XX FHA is inherited as an autosomal dominant trait. Low levels of HDL ("good
XX cholesterol") in the blood correlate with a high risk of cardiovascular
XX disease, particularly coronary artery disease, but also cerebrovascular
XX disease, coronary restenosis, and peripheral vascular disease.
XX Conversely, a high level of HDL has protective effects against
XX cardiovascular disease. The invention provides genetic constructs and
XX transgenic cells and non-human animals comprising human ABC1 nucleic
XX acids, and methods of gene therapy for the treatment or prevention of
XX cardiovascular disease comprising the administration of an expression
XX vector encoding ABC1 or an active fragment thereof. The invention also
XX encompasses compounds which mimic ABC1 activity, compounds which
XX stimulate ABC1 expression and methods of screening for such compounds. It
XX further relates to methods for determining whether a patient has an
XX increased risk for cardiovascular disease due to polymorphisms in the
XX ABC1 gene. Human ABC1 proteins and nucleotides can be used to treat or
XX prevent cardiovascular disease, especially coronary artery disease,
XX cerebrovascular disease, coronary restenosis or peripheral vascular
XX disease. They may also be used in the treatment of diseases associated
XX with ABC1 biological activity, such as Alzheimer's disease, Niemann-Pick
XX disease, Huntington's disease, X-linked adrenoleukodystrophy and cancer.
XX The invention specifically excludes proteins with the exact amino acid
XX sequences of GenBank Accession No: CAA10005.1 and X75925, and the nucleic
XX acid with the exact sequence as Genbank Accession No: AJ012376.1.
XX Sequences C69269-C69282 represent published and corrected versions of
XX human ABC1 gene exon fragments
XX
XX Sequence 21 BP; 7 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 375 GGCTTCAGCCACGCTCT 391
DB 17 GGCTTCAGCCACGCTCT 1
RESULT 1674
```

AAZ60648/c  
 ID AAZ60648 standard; DNA; 21 BP.  
 XX  
 AC AAZ60648;  
 XX  
 XX 16-MAY-2000 (first entry)  
 DT  
 XX PCR primer used to amplify kappa3-related opioid receptor cDNA.  
 DE  
 XX Splice variant; kappa3 opioid receptor; muopioid receptor-1; KOR-3;  
 KM morphine analgesia; opioid-mediated ingestive response; opioid;  
 KM analgesic; gastrointestinal motility; respiration; immune system;  
 KM endocrine system; autonomous nervous system; peristalsis regulator;  
 KM body weight; neuroendocrine disorder; PCR primer; ss.  
 XX  
 XX Mus sp.  
 OS  
 XX WO200004151-A2.  
 PN  
 XX 27-JAN-2000.  
 PD  
 XX 15-JUL-1999; 99WO-US015977.  
 XX  
 PF 16-JUL-1998; 98US-0093002P.  
 XX  
 PR (SLOAN KETTERING INST CANCER RES.  
 XX Pasternak G, Pan Y;  
 PI  
 XX WPI; 2000-182421/16.  
 DR  
 XX New splice variants of the kappa-opioid receptor, useful in screening for  
 PT selective analgesics and for regulating morphine analgesia or body  
 PT weight.  
 PS  
 XX Example 1; Page 29; 61pp; English.  
 XX  
 XX PCR primers AAZ60647-48 were used to amplify cDNA fragments of the murine  
 CC kappa3 opioid receptor (muopioid receptor-1, KOR-3). The specification  
 CC describes four new exons of the KOR-3 gene, which combine to yield seven  
 CC new KOR-3 splice variants of human, mouse and rat origin. These splice  
 CC variants are potential targets for modulating morphine analgesia and  
 CC opioid-mediated ingestive responses. The KOR-3 polypeptide are used to  
 CC screen compounds for opioid activity. Such compounds are potential  
 CC analgesics or more generally agents that affect gastrointestinal  
 CC motility, respiration or the immune, endocrine or autonomous nervous  
 CC systems, e.g. regulators of peristalsis. Antagonists, agonists and  
 CC ligands of KOR-3, as well as DNA vectors expressing KOR-3-encoding  
 CC nucleic acids, or sequences antisense to KOR-3 nucleic acids, are used to  
 CC regulate morphine analgesia and body weight. The level of KOR-3 or tissue  
 CC distribution of KOR-3 can be measured to diagnose KOR-3 related  
 CC pharmacological abnormalities or neuroendocrine disorders, particularly  
 CC inherited disorders. Transgenic animals with extra copies of the KOR-3  
 CC gene, or with endogenous alleles deleted, are used to study loss or gain  
 CC of function phenotypes  
 XX  
 SQ Sequence 21 BP; 4 A; 7 C; 6 G; 4 T; 0 U; 0 Other;  
 QY  
 Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Db 681 CACGACACCTTGTGG 697  
 18 CACGACATCCTCTGG 2  
 RESULT 1675  
 AAZ60652/c  
 ID AAZ60652 standard; DNA; 21 BP.  
 XX  
 AC AAZ60652;  
 XX

DT 16-MAY-2000 (first entry)  
 DE  
 XX PCR primer used to amplify kappa3-related opioid receptor cDNA.  
 XX  
 XX Splice variant; kappa3 opioid receptor; muopioid receptor-1; KOR-3;  
 KM morphine analgesia; opioid-mediated ingestive response; opioid;  
 KM analgesic; gastrointestinal motility; respiration; immune system;  
 KM endocrine system; autonomous nervous system; peristalsis regulator;  
 KM body weight; neuroendocrine disorder; PCR primer; ss.  
 XX  
 XX Mus sp.  
 OS  
 XX WO200004151-A2.  
 PN  
 XX 27-JAN-2000.  
 PD  
 XX 15-JUL-1999; 99WO-US015977.  
 XX  
 PF 16-JUL-1998; 98US-0093002P.  
 XX  
 PR (SLOAN KETTERING INST CANCER RES.  
 XX Pasternak G, Pan Y;  
 PI  
 XX WPI; 2000-182421/16.  
 DR  
 XX New splice variants of the kappa-opioid receptor, useful in screening for  
 PT selective analgesics and for regulating morphine analgesia or body  
 PT weight.  
 PS  
 XX Example 1; Page 30; 61pp; English.  
 XX  
 XX PCR primers AAZ60651-52 were used to amplify cDNA fragments of the murine  
 CC kappa3 opioid receptor (muopioid receptor-1, KOR-3). The specification  
 CC describes four new exons of the KOR-3 gene, which combine to yield seven  
 CC new KOR-3 splice variants of human, mouse and rat origin. These splice  
 CC variants are potential targets for modulating morphine analgesia and  
 CC opioid-mediated ingestive responses. The KOR-3 polypeptide are used to  
 CC screen compounds for opioid activity. Such compounds are potential  
 CC analgesics or more generally agents that affect gastrointestinal  
 CC motility, respiration or the immune, endocrine or autonomous nervous  
 CC systems, e.g. regulators of peristalsis. Antagonists, agonists and  
 CC ligands of KOR-3, as well as DNA vectors expressing KOR-3-encoding  
 CC nucleic acids, or sequences antisense to KOR-3 nucleic acids, are used to  
 CC regulate morphine analgesia and body weight. The level of KOR-3 or tissue  
 CC distribution of KOR-3 can be measured to diagnose KOR-3 related  
 CC pharmacological abnormalities or neuroendocrine disorders, particularly  
 CC inherited disorders. Transgenic animals with extra copies of the KOR-3  
 CC gene, or with endogenous alleles deleted, are used to study loss or gain  
 CC of function phenotypes  
 XX  
 SQ Sequence 21 BP; 4 A; 7 C; 6 G; 4 T; 0 U; 0 Other;  
 QY  
 Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Db 681 CACGACACCTTGTGG 697  
 18 CACGACATCCTCTGG 2  
 RESULT 1676  
 AAZ77136  
 ID AAZ77136 standard; DNA; 21 BP.  
 XX  
 AC AAZ77136;  
 XX  
 DT 10-SEP-2001 (first entry)  
 XX  
 DE Human biallelic marker downstream amplification primer SEQ ID NO:11492.  
 XX  
 KW Human genome; biallelic marker; high density disequilibrium map;

KM	genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW	haplotyping; hybridisation; identification; characterisation;
KM	amplification; single nucleotide polymorphism; SNP; PCR primer;
XX	diagnosis; ss.
OS	Homo sapiens.
PN	MO9954500-A2.
PD	28-OCT-1999.
XX	
PF	21-APR-1999; 99WO-IB000822.
XX	
PR	21-APR-1998; 98US-0082614P.
XX	
PA	23-NOV-1998; 98US-0109732P.
XX	
XX	(GEST ) GENSET.
PI	
XX	Cohen D, Blumenfeld M, Chumakov I;
XX	WPI; 2000-013267/01.
DR	
XX	
PT	Novel diallelic markers used to construct a high density disequilibrium
PT	map of the human genome.
XX	
XX	
PS	Claim 9; Page 2680; 2745pp; English.
XX	
CC	AAZ65654 to AAZ69578 represent human diallelic markers from the present
CC	invention, which contain a polymorphic base at position 24 of their
CC	nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC	primers for the diallelic markers. The diallelic markers of the invention
CC	have a variety of uses: they can be used for high density mapping of the
CC	human genome, and in complex association studies and haplotyping studies
CC	which are useful in determining the genetic basis for disease states.
CC	Compositions and methods of the invention can also be useful for the
CC	identification of the targets for the development of pharmaceutical
CC	agents and diagnostic methods, as well as the characterisation of the
CC	differential efficacious responses to and side effects from
CC	pharmaceutical agents acting on a disease as well as other treatment.
CC	N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC	3367, are not actually given a sequence in the sequence listing from the
CC	present invention
XX	
XX	
SQ	Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
	Query Match 0.8%; Score 13.8; DB 1; Length 21;
	Best Local Similarity 88.2%; Pred. No. 1.1e+03;
	Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0
QY	364 GAGAGTACCGAGGGCTC 380
XX	
Db	2 GAGAGTACTTAGGCTTC 18
	RESULT 1677
XX	AAZ76024
ID	AAZ76024 standard; DNA; 21 BP.
XX	
AC	AAZ76024;
XX	
DT	10-SEP-2001 (first entry)
XX	
DE	Human diallelic marker downstream amplification primer SEQ ID NO:10380.
KW	Human genome; diallelic marker; high density disequilibrium map;
KW	genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW	haplotyping; hybridisation; identification; characterisation;
KM	amplification; single nucleotide polymorphism; SNP; PCR primer;
XX	diagnosis; ss.
XX	
OS	Homo sapiens.
XX	
XX	MO9954500-A2.

```

XX 28-OCT-1999.
PD
XX
PF 21-APR-1999; 99MO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
PR
XX 23-NOV-1998; 98US-0109732P.
XX
XX (GEST ) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
PI
XX WPI; 2000-013267/01.
DR
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 2443; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2851, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
XX Sequence 21 BP; 7 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1445 TGAACATCCATTCTTC 1461
XX ||||||| |||
XX 5 TGAACATCCACTCTCC 21
XX
XX RESULT 1678
XX AAF95402/C
XX ID AAF95402 standard; DNA; 21 BP.
XX
XX AAF95402;
XX AC
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #163.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KM polymorphism; vascular disease; coronary artery disease; forensics;
KM myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KM pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,T)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000MO-US024503.
XX
XX

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XX 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX Lander ES, Gargill M, Ireland US, Bolk S, Daley GO, McCarthy JU;
XX WPI, 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 59; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 6 A; 11 C; 2 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 226 GAGAGTGTGTGTGTGTGG 242
DB 21 GAGTGTGTGTGTGTGTG 5
XX
XX RESULT 1679
XX AAF95850/C
XX ID AAF95850 standard; DNA; 21 BP.
XX
XX AAF95850;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #611.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,T)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.

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XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX Lander ES, Gargill M, Ireland US, Bolk S, Daley GO, McCarthy JU;
XX WPI, 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 90; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 190 AAGACCAATGTGTGCCCC 206
DB 21 AAGACTAATGTGTGCCAC 5
XX
XX RESULT 1680
XX AAF97421/C
XX ID AAF97421 standard; DNA; 21 BP.
XX
XX AAF97421;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #2182.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,G)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.

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```
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 198; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 7 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 392 CGATGAGGTGCACTCT 408
DB 20 CTGTTGAGGTGCACTCT 4
XX
RESULT 1681
AAF96964
ID AAF96964 standard; DNA; 21 BP.
XX
AC AAF96964;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #1725.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,C)
FT /*tag= a
FT /*standard_name= "single nucleotide polymorphism"
XX
EN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US024503.
XX
PR 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX
```

```
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 163; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 3 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1031 CTGACTTTGGCCTGGCC 1047
DB 1 CTGACTTTGGCCTGGCC 17
XX
RESULT 1682
AAF96582
ID AAF96582 standard; DNA; 21 BP.
XX
AC AAF96582;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #1343.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,A)
FT /*tag= a
FT /*standard_name= "single nucleotide polymorphism"
XX
EN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US024503.
XX
PR 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
```

XX Example; Page 140; 242pp; English.  
XX  
CC The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotypic  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX  
SQ Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred.No.1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1268 CTGAGGAGACGTGGCCA 1284  
Db 1 CTATGGAGACGTGGCCA 17  
RESULT 1683  
AAF93032/C  
ID AAF93032 standard; DNA; 21 BP.  
XX  
AC AAF93032;  
XX  
DT 17-MAY-2001 (first entry)  
XX  
DE Partial exon 7 corrected sequence.  
XX  
KW High density lipoprotein-cholesterol; HDL-C; cardiovascular; ABCI; ds.  
XX  
XX Homo sapiens.  
XX  
PN MO200115676-A2.  
XX  
PD 08-MAR-2001.  
XX  
PF 01-SEP-2000; 2000MO-IB001492.  
XX  
PR 01-SEP-1999; 99US-0151977P.  
XX  
PR 15-MAR-2000; 2000US-00526193.  
XX  
PR 23-JUN-2000; 2000US-0213958P.  
XX  
PA (UYBR-) UNIV BRITISH COLUMBIA.  
XX  
PA (XENO-) XENON GENETICS INC.  
XX  
PI Hayden MR, Brooks-Wilson AR, Pimstone SN, Clee SM;  
XX  
XX WPI; 2001-244356/25.  
XX  
XX Treating a lower than normal high density lipoprotein-cholesterol (HDL-C)  
XX level, a higher than normal triglyceride level, or a cardiovascular  
XX disease, by administering a compound that modulates LXR- or RXR-mediated  
XX transcriptional activity.  
XX  
XX Disclosure; Fig 4; 317pp; English.  
XX  
XX The present invention relates to a method for treating a patient  
XX diagnosed as having a lower than normal high density lipoprotein-  
XX cholesterol (HDL-C) level, a higher than normal triglyceride level, or a  
XX cardiovascular disease, involving administering a compound that modulates  
XX LXR- or RXR-mediated transcriptional activity or ABCI expression or  
XX activity. The LXR gene product may be used in an assay to identify  
XX compounds useful for the treatment of a disease or condition selected a  
XX lower than normal HDL cholesterol level, a higher than normal  
XX triglyceride level, and a cardiovascular disease

XX  
SQ Sequence 21 BP; 7 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred.No.1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 375 GAGCTTCAGCCACGTCCT 391  
Db 17 GCGTTCAGCCACGTCCT 1  
RESULT 1684  
AAH40230/C  
ID AAH40230 standard; DNA; 21 BP.  
XX  
AC AAH40230;  
XX  
DT 14-AUG-2001 (first entry)  
XX  
DE SNP specific lower PCR primer SEQ ID 3026.  
XX  
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
XX SNPE; genotyping; agammaglobulinemia; diabetes insipidus; cancer;  
XX Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolemia;  
XX polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
XX acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
XX inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX MO200129262-A2.  
XX  
XX 26-APR-2001.  
XX  
XX 13-OCT-2000; 2000MO-US028436.  
XX  
XX 15-OCT-1999; 99US-0160096P.  
XX  
XX (ORCH-) ORCHID BIOSCIENCES INC.  
XX  
XX Picoult-Newburg L, Pohl M;  
XX  
XX WPI; 2001-290930/30.  
XX  
XX New genotyping oligonucleotide, useful for detecting the presence,  
XX absence or identity of single polynucleotide polymorphism in a nucleic  
XX acid sample.  
XX  
XX Claim 1; Page 65; 83pp; English.  
XX  
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
XX primer extension (SNPE) primers, and the sequences of regions flanking  
XX sites of single nucleotide polymorphisms SNPs. The present invention  
XX includes kits for determining the presence or absence of a SNP, using the  
XX oligonucleotides of the invention. The PCR primers are used to amplify a  
XX SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
XX The oligonucleotides are useful for genotyping a nucleic acid sample by  
XX performing a single-nucleotide primer extension reaction. The  
XX oligonucleotides are useful for determining the presence, absence or  
XX identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
XX assess by association analysis the genotype of an individual or group of  
XX individuals, having a pathological phenotypic trait suspected of being  
XX caused by one or more SNPs. Phenotypic traits include diseases e.g.  
XX agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
XX dystrophy, familial hypercholesterolemia, polycystic kidney disease,  
XX osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
XX traits also include symptoms of or susceptibility to multifactorial  
XX diseases of which a component is or may be genetic such as autoimmune  
XX diseases, including, rheumatoid arthritis, multiple sclerosis,  
XX inflammation, cancer, nervous system diseases and infection by pathogenic  
XX microorganism. The method is also useful in forensic investigations and  
XX paternity analysis. The present sequence represents a PCR primer specific

```
CC for a human SNP containing DNA sequence
XX
SQ Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.8%; Score 13.8; DB 1; Length 21;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 751 CCGGAGTGTGCTGCT 767
Db 17 CAGGAAGTTCCTGCT 1

RESULT 1685
AAF70928/c
ID AAF70928 standard; DNA; 21 BP.
XX
AC AAF70928;
XX
DE 20-APR-2001 (first entry)
XX
DE bFGF DNA ligand #61.
XX
XX ligand; basic fibroblast growth factor; bFGF; gene therapy; vascular;
XX atherosclerosis; angioplasty; stability; ss.
XX
OS Unidentified.
XX
PN US6177557-B1.
XX
PD 23-JAN-2001.
XX
PF 05-AUG-1996; 96US-00687421.
XX
PR 11-JUN-1990; 90US-00536428.
PR 10-JUN-1991; 91US-00714131.
PR 06-NOV-1992; 92US-00973333.
PR 10-FEB-1994; 94US-00195005.
PR 28-MAR-1994; 94US-00219012.
XX
PA (NEXS-) NEXSTAR PHARM INC.
XX
PI Janjic N, Gold L, Tasset D;
XX
DR WPI; 2001-158583/16.
XX
PT Novel nucleic acid ligands to basic fibroblast growth factor that are
PT useful as inhibitors of basic fibroblast growth factors and 2'-amino
PT modified RNA ligands, exhibit increased in vivo stability.
XX
PS Claim 1; Col 69-75; 153pp; English.
XX
CC The present invention relates to a purified and isolated non-naturally
CC occurring DNA ligands to basic fibroblast growth factor (bFGF). The
CC ligands are useful as part of gene therapy treatments and for diagnosing
CC pathogenesis of vascular diseases including initiation and progression of
CC atherosclerosis, acute coronary syndromes, vein graft disease and
CC restenosis following coronary angioplasty. The ligands have improved
CC stability in vivo
XX
SQ Sequence 21 BP; 3 A; 4 C; 5 G; 2 T; 0 U; 7 Other;

Query Match
Best Local Similarity 0.8%; Score 13.8; DB 1; Length 21;
Matches 12; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 84 CCGGAGCTCTGAGTCTCG 104
Db 21 CYGGGCGYTRAAATCTCTCG 1

RESULT 1686
AAF55160/c

ID AAF55160 standard; DNA; 21 BP.
XX
AC AAF55160;
XX
DE 29-MAY-2001 (first entry)
XX
DE Probe used to identify human hypocretin (orexin) receptor 1 gene.
XX
XX Human; hypocretin receptor 1; orexin receptor 1; HCRTR1; chromosome 1;
XX 1p33; central nervous system modulator; probe; ss.
XX
OS Homo sapiens.
XX
PN WO200114555-A1.
XX
PD 01-MAR-2001.
XX
PF 22-AUG-2000; 2000WO-US022986.
XX
PR 23-AUG-1999; 99US-00379083.
PR 07-JAN-2000; 2000US-00479128.
XX
XX (DECO-) DECODE GENETICS EHF.
XX
PI Olafsdottir BR, Gulcher J;
XX
DR WPI; 2001-211306/21.
XX
XX
PT Novel isolated nucleic acid molecule encoding hypocretin (orexin)
PT receptor 1 useful for treating and diagnosing narcolepsy.
XX
PS Example 1; Page 20; 44pp; English.
XX
CC Probes AAF55160-76 were used to identify a human hypocretin (orexin)
CC receptor 1 (HCRTR1) gene. The HCRTR1 gene is present on chromosome 1,
CC location 1p33. It is likely that a mutation in the HCRTR1 gene is
CC associated with narcolepsy. HCRTR1 is a central nervous system modulator.
CC The HCRTR1 polypeptide and polynucleotide are useful for diagnosing or
CC treating narcolepsy in an individual. The HCRTR1 polynucleotide is a
CC source of probes and primers, and is also used to produce the protein
CC recombinantly
XX
SQ Sequence 21 BP; 6 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.8%; Score 13.8; DB 1; Length 21;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1480 ATCCACAAACTTCTCGA 1496
Db 17 AGCCTCAAACTTCTCGA 1

RESULT 1687
AAH89038/c
ID AAH89038 standard; DNA; 21 BP.
XX
AC AAH89038;
XX
DE 09-SEP-2004 (revised)
DE 27-FEB-2002 (first entry)
XX
XX Human polymorphic oligonucleotide AC005336 fragment #5.
XX
DE Human; single nucleotide polymorphic; SNP; forensic science;
XX paternity testing; phenotypic trait; genetic mapping; animal breeding;
XX plant breeding; ds.
XX
XX Homo sapiens.
XX
OS Unidentified.
XX
XX
XX Key Location/Qualifiers
FT variation 11
```

```
FT      /*tag= a
FT      /standard_name= "single nucleotide polymorphism"
XX
XX      WO200134840-A2.
XX
XX      17-MAY-2001.
XX
XX      10-NOV-2000; 2000WO-US030766.
XX
XX      10-NOV-1999; 99US-0164596P.
XX
XX      (GLAXO ) GLAXO GROUP LTD.
XX      (AFRY-) AFRYMETRIX INC.
XX
XX      Au K, Chen J, Patil N, Thomas D;
XX
XX      WPI; 2001-335945/35.
XX
XX      New polymorphic sites derived from the human genome are useful to
XX      determine sites correlating with phenotypic traits, particularly disease,
XX      and also in forensics and paternity testing.
XX
XX      Claim 71; Page 12; 43pp; English.
XX
XX      The present invention relates to human oligonucleotides comprising a
XX      single nucleotide polymorphic site (SNP: AAG8797-AAH89219). The present
XX      sequence is one such oligonucleotide. The oligonucleotides can be used in
XX      forensics, paternity testing, correlation of polymorphisms with
XX      phenotypic traits, genetic mapping of phenotypic traits and marker
XX      assisted breeding of animals and crop plants
XX
XX      Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
XX      Sequence 21 BP; 4 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.8; DB 1; Length 21;
XX      Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX      Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX      198 TGGTGCCCTGAGCAGA 214
XX      19 TGGAGCCCTGAGCTGA 3
XX
XX      RESULT 1688
XX      ABA01349
XX      ID ABA01349 standard; RNA; 21 BP.
XX
XX      AC ABA01349;
XX
XX      03-JUL-2002 (first entry)
XX
XX      YMPD oligonucleotide #9.
XX
XX      Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX
XX      Simian immunodeficiency virus.
XX
XX      US6303295-B1.
XX
XX      16-OCT-2001.
XX
XX      12-JUL-1996; 96US-00679493.
XX
XX      14-JUL-1995; 95US-0001203P.
XX      01-SEP-1995; 95US-0003112P.
XX
XX      (UYGE-) UNIV GEORGIA RES FOUND INC.
XX
XX      Taylor EW, Nadiimpalli RG, Ramanathan CS;
XX
XX      WPI; 2002-024734/03.
XX
```

```
PT      New selenoprotein for use in detecting certain viruses, e.g. human
PT      immunodeficiency virus (HIV) or Ebola, cancer and immune system
PT      disorders.
XX
XX      Disclosure; Col 69-70; 140pp; English.
XX
XX      The present invention relates to selenoproteins encoded in the genome of
XX      a virus, where the coding sequence of the selenoprotein is genetically
XX      engineered for expression in a nucleic acid construct. The invention also
XX      discloses a method for identifying selenoprotein coding sequences, for
XX      detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
XX      disorders. The present sequence was used to illustrate the invention
XX
XX      Sequence 21 BP; 7 A; 4 C; 4 G; 0 T; 6 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.8; DB 1; Length 21;
XX      Best Local Similarity 70.6%; Pred. No. 1.1e+03;
XX      Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
XX
XX      866 AGCAGTACCTGGATGAC 882
XX      5 ACCAGUACAGGAGUAC 21
XX
XX      RESULT 1689
XX      ABA91520
XX      ID ABA91520 standard; DNA; 21 BP.
XX
XX      ABA91520;
XX
XX      23-APR-2002 (first entry)
XX
XX      DNA probe for human papilloma virus genotyping.
XX
XX      HPV; genotyping; nucleic acid detection; probe; ss.
XX
XX      Human papillomavirus.
XX
XX      WO200206531-A2.
XX
XX      24-JAN-2002.
XX
XX      12-JUL-2001; 2001WO-US022166.
XX
XX      14-JUL-2000; 2000US-00616761.
XX      30-MAR-2001; 2001US-00823647.
XX
XX      (GENE-) APPLIED GENE TECHNOLOGIES INC.
XX
XX      Datagupla N;
XX
XX      WPI; 2002-171819/22.
XX
XX      Probes for detecting target nucleotide sequence in sample, has sequence
XX      that forms hairpin structure having a double-stranded segment and single-
XX      stranded loop collectively forming region complementary to target
XX      sequence.
XX
XX      Example 1; Page 44; 72pp; English.
XX
XX      The present sequence comprises a probe for human papillomavirus (HPV)
XX      genotyping that was used in an example of the use of hairpin probes in
XX      nucleic acid hybridisation analysis. The probe sequence is present within
XX      the 5' stem portion of an RNA-DNA probe (see ABA91521) that is capable of
XX      forming a hairpin structure. The DNA portion of the hairpin probe
XX      includes methylphosphonates. The hairpin probe is immobilised onto a
XX      membrane by BSA conjugation and the resulting probe-containing strip is
XX      contacted with HPV genomic DNA. After hybridisation, the strip is treated
XX      with RNase H to digest the portion of the hybridised probe with RNA-DNA
XX      structure. A second hybridisation is then performed using biotin-labelled
XX      probes, which are complementary to the portions of immobilised probe that
XX      become single-stranded after hybridisation and digestion. Biotin in the
XX      hybrid is detected by streptavidin-horseradish peroxidase conjugate
XX
```

CC chemiluminescence. This is an example of the use of hairpin probes that  
 CC are capable of both intramolecular and intermolecular hybridisation and  
 CC in which the nucleotide sequence that is complementary to the target  
 CC sequence is located entirely within the double-stranded portion of the  
 CC hairpin probe. The use of such probes reduces background hybridisation,  
 CC thereby improving specificity

XX Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1677 CCCCACTACATCTTCC 1693

Db 4 CCGTACTACATCTTCC 20

RESULT 1690

ABK65477/c

ID ABK65477 standard; DNA; 21 BP.

XX ABK65477;

02-JUL-2002 (first entry)

Human single nucleotide polymorphism #97.

Human; single nucleotide polymorphism; SNP; sickle cell anaemia;

agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;

muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;

familial hypercholesterolaemia; polycystic kidney disease; cancer;

hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;

Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;

acute intermittent porphyria; inflammation; nervous system disorder;

infection; rheumatoid arthritis; multiple sclerosis; diabetes;

systemic lupus erythematosus; Graves disease; longevity; obesity;

balanitis; fertility; forensic; paternity testing; ss.

XX Homo sapiens.

OS US2002037508-A1.

28-MAR-2002.

18-JAN-2001; 2001US-00765081.

19-JAN-2000; 2000US-0176861P.

(CARG/) CARGILL M.

(IREL/) IRELAND J S.

(LAND/) LANDER E S.

Cargill M, Ireland JS, Lander ES;

WPI; 2002-315108/35.

Nucleic acid comprising single nucleotide polymorphisms, useful in

forensics, paternity testing and diagnosis of disease.

Claim 1; Page 46; 96pp; English.

The invention relates to a nucleic acid comprising single nucleotide

polymorphisms (SNPs) associated with diseases. The nucleic acids

comprising the SNPs and probes and primers for detecting them may be used

in assays for the diagnosis of diseases associated with SNPs (such as

sickle cell anaemia, agammaglobulinemia, diabetes insipidus, Lesch-Nyhan

syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,

familial hypercholesterolaemia, polycystic kidney disease, hereditary

spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary

hemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos

syndrome, osteogenesis imperfecta, and acute intermittent porphyria,

CC symptoms of, or susceptibility to, multifactorial diseases of which a

CC component is or may be genetic, such as autoimmune diseases, such

CC inflammation, cancer, diseases of the nervous system, and infection by

CC pathogenic microorganisms, autoimmune diseases including rheumatoid

CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-

CC independent), systemic lupus erythematosus and Graves disease, cancers

CC including cancers of the bladder, brain, breast, colon, oesophagus,

CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,

CC skin, stomach and uterus, longevity, appearance (e.g., baldness,

CC obesity), strength, speed, endurance, fertility, and susceptibility or

CC receptivity to particular drugs or therapeutic treatments), in forensics

CC and in paternity testing. ABK65381-ABK65841 represent human single

CC nucleotide polymorphisms of the invention

XX Sequence 21 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;

Best Local Similarity 78.9%; Pred. No. 1.1e+03;

Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 767 TCAAGACCTCAACACGC 765

Db 21 TCAAGACCTCAACACGC 3

RESULT 1691

ABK60808/c

ID ABK60808 standard; DNA; 21 BP.

XX ABK60808;

05-NOV-2002 (first entry)

Human polymorphism associated DNA sequence #445.

Aminopeptidase P; XPNP2; bradykinin receptor B1; ds; BDKRB1;

tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;

KLK1; bradykinin receptor B2; BDKRB2; gene therapy;

angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;

polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;

cardiovascular disease; angina pectoris; hypertension; heart failure;

myocardial infarction; ventricular hypertrophy; vascular disease;

aneurysm; embolism; thrombosis; coronary artery disease; angioedema;

arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;

autoimmune disease; inflammatory arthritis; cancer; wound;

viral infection; bacterial infection; fungal infection; COPD;

Chronic obstructive pulmonary disease; enterocolitis.

XX Homo sapiens.

OS WO200261131-A2.

08-AUG-2002.

03-DEC-2001; 2001WO-US047235.

04-DEC-2000; 2000US-0251015P.

23-JAN-2001; 2001US-0263678P.

02-MAR-2001; 2001US-0273037P.

(BRIM ) BRISTOL-MYERS SQUIBB CO.

(TSUC/) TSUCHIHASHI Z.

(HUIL/) HUI L.

Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;

Swanson BN, Powell JR;

WPI; 2002-619265/66.

New isolated nucleic acid with at least one polymorphic position, useful

for detecting, diagnosing and treating disorders such as angioedema,

cancer, viral, bacterial or fungal infection, cardiovascular and

autoimmune diseases.



Db 19 ACTGTTCCGTCTCAGC 3

|||||

RESULT 1693  
ABS60582/C  
ID ABS60582 standard; DNA, 21 BP.  
XX  
XX ABS60582;  
XX  
XX 05-NOV-2002 (first entry)  
XX  
XX Human polymorphism associated DNA sequence #331.  
XX  
XX Amino peptidase P; XPNP2; bradykinin receptor B1; ds; BDKRB1;  
XX tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; Kallikrein 1;  
XX KLK1; bradykinin receptor B2; BDKRB2; gene therapy;  
XX angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;  
XX polymorphisms; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;  
XX cardiovascular disease; angina pectoris; hypertension; heart failure;  
XX myocardial infarction; ventricular hypertrophy; vascular disease;  
XX aneurysm; embolism; thrombosis; coronary artery disease; angioedema;  
XX arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;  
XX autoimmune disease; inflammatory arthritis; cancer; wound;  
XX viral infection; bacterial infection; fungal infection; COPD;  
XX chronic obstructive pulmonary disease; enterocolitis.  
XX  
XX Homo sapiens.  
XX  
XX WO200261131-A2.  
XX  
XX PD 08-AUG-2002.  
XX  
XX PF 03-DEC-2001; 2001WO-US047235.  
XX  
XX PR 04-DEC-2000; 2000US-0251015P.  
XX 23-JAN-2001; 2001US-0263678P.  
XX PR 02-MAR-2001; 2001US-0273037P.  
XX  
XX PA (BRIM ) BRISTOL-MYERS SQUIBB CO.  
XX (TSUC/) TSUCHIHASHI Z.  
XX (HUI/L/) HUI L.  
XX  
XX TSUCHIHASHI Z, HUI L, Zerba KE, Ma-Edmonds M, Perrone ME;  
XX Swanson BM, Powell JR;  
XX  
XX WPI; 2002-619265/66.  
XX  
XX PT New isolated nucleic acid with at least one polymorphic position, useful  
XX for detecting, diagnosing and treating disorders such as angioedema,  
XX cancer, viral, bacterial or fungal infection, cardiovascular and  
XX autoimmune diseases.  
XX  
XX PT  
XX  
XX PS Disclosure; Page 809; 977pp; English.  
XX  
XX The invention relates to an isolated nucleic acid from a human gene  
XX encoding aminopeptidase P (XPNP2), bradykinin receptor B1 (BDKRB1),  
XX tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein  
XX 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme  
XX 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one  
XX polymorphic position as provided in the detailed summary of single  
XX nucleotide polymorphisms comprising additional 5' and 3' flanking genomic  
XX sequence (2) analysing (M1) at least one nucleic acid sample comprising  
XX obtaining the sample from one or more individuals and determining the  
XX nucleic acid sequence at one or more polymorphic positions in a gene  
XX encoding a protein selected from the group above; (3) constructing (M2)  
XX haplotypes using the genes comprising grouping at least two nucleic acids  
XX; (4) identifying (M3) an individual at risk of developing a disorder  
XX upon administration of an ACE inhibitor and/or vasopeptidase inhibitor  
XX using the polymorphic data; (5) a library of nucleic acids, each of which  
XX comprises one or more polymorphic positions within a gene encoding a  
XX human protein selected from the group above; and (6) genotyping (M4) an

CC individual comprising obtaining a nucleic acid sample, determining the  
CC nucleotide present in at least one polymorphic position, and comparing at  
CC least one position with a known data set. The genes, (M1, M2, M3 and M4)  
CC and compositions are useful for detecting, diagnosing, treating,  
CC preventing various disorders such as angioedema and diseases which  
CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's  
CC disease, trachoma, and cardiovascular diseases like angina pectoris,  
CC hypertension, heart failure, myocardial infarction, ventricular  
CC hypertrophy, vascular diseases aneurysm, embolism, thrombosis, coronary  
CC artery disease, arteriosclerosis and/or atherosclerosis, and  
CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory  
CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic  
CC obstructive pulmonary disease (COPD) and enterocolitis (many other  
CC diseases and disorders are listed in the specification). The  
CC polymucleotides are also useful for chromosome identification. Antibodies  
CC against the proteins may be utilised for immunophenotyping of cell lines  
CC and biological samples. The present sequence is included in the sequence  
XX listing but is not referred to anywhere else in the specification

SQ Sequence 21 BP, 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 915 ACTGTTCCGTCTCAGC 931  
Db 19 ACTGTTCCGTCTCAGC 3

|||||

RESULT 1694  
AAS99452  
ID AAS99452 standard; DNA, 21 BP.  
XX  
XX AC AAS99452;  
XX  
XX DT 12-MAR-2002 (first entry)  
XX  
XX DE Anti-human AILIM monoclonal antibody, sequencing primer #2.  
XX  
XX

Human; antineumatic; antiarthritic; antidiabetic; antipsoriatic;  
XX antiallergic; antitumor; neuroprotective; antithyroid; vasotropic;  
XX immunosuppressive; dermatological; antiinflammatory; hepatotropic;  
XX activation inducible lymphocyte immunomodulatory molecule; AILIM;  
XX monoclonal antibody; allergy; rheumatoid arthritis; diabetes mellitus;  
XX multiple sclerosis; autoimmune thyroiditis; psoriasis; hepatitis;  
XX allergic contact-type dermatitis; chronic inflammatory dermatosis;  
XX systemic lupus erythematosus; autoimmune disorder; inflammation;  
XX graft versus host reaction; immune rejection; intestinal immunity;  
XX ulcerative colitis; pneumonia; nephritis; vasculitis; pancreatitis;  
XX PCR primer; ss.

XX Homo sapiens.  
XX Synthetic.

XX WO200187981-A2.

XX PD 22-NOV-2001.

XX PF 15-MAY-2001; 2001WO-JP004035.

XX PR 18-MAY-2000; 2000JP-00147116.

XX PR 30-MAR-2001; 2001JP-00099508.

XX PA (NISR ) JAPAN TOBACCO INC.

XX PT Tsuji T, Tezuka K, Hori N;

XX WPI; 2002-075313/10.

XX New human monoclonal antibody that binds to activation inducible  
XX lymphocyte immunomodulatory molecule, useful for treating rheumatoid  
XX arthritis, multiple sclerosis and inflammation.



XX  
PS Example 10; Page 247; 300pp; English.

CC The invention relates to a novel human antibody (1), preferably a human  
CC monoclonal antibody which binds to an activation inducible lymphocyte  
CC immunomodulatory molecule (Ailim). (1) is useful for modulating signal  
CC transduction into a cell mediated by Ailim, for modulating proliferation  
CC of Ailim-expressing cells, for inducing antibody-dependent cytotoxicity  
CC Ailim-expressing cells, and for inducing antibody-dependent cytotoxicity  
CC against Ailim-expressing cells and/or immune cytolytic or apoptotic of  
CC Ailim-expressing cells. (1) is useful for treating, preventing or  
CC prophylaxis of delayed type allergy. (1) is useful for treating and  
CC preventing various diseases associated with Ailim-mediated costimulatory  
CC transduction, and for inhibiting the onset and/or advancement of the  
CC diseases. (1) is useful for suppression, prevention and/or treatment of  
CC rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis,  
CC allergic contact-type dermatitis, chronic inflammatory dermatosis,  
CC systemic lupus erythematosus, insulin-dependent diabetes mellitus,  
CC psoriasis, autoimmune or allergic disorders, inflammation, graft versus  
CC host reaction, graft versus host disease, immune rejection, disorders  
CC caused by abnormal intestinal immunity, specifically inflammatory  
CC intestinal disorders such as ulcerative colitis, pneumonia, hepatitis,  
CC nephritis, vasculitis, and pancreatitis. (1) induces no serious  
CC immunorejection due to antigenicity to human, i.e., human anti-mouse  
CC antigenicity (HAMA) in a host. AAS99444-AAS99477 represent anti-human  
CC Ailim monoclonal antibody coding sequences and PCR primers of the  
CC invention

SQ Sequence 21 BP; 4 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 849 CCTGCACAGACCTGA 865  
1 CCTGCACAGAGGCTTCA 17

Db

RESULT 1695  
AAD45724  
AAD45724 standard; DNA; 21 BP.

AC AAD45724;  
XX  
XX  
DT 27-DEC-2002 (first entry)  
XX  
DE Mycobacterium sp. hsp70 operon promoter amplifying primer, Hsp701.  
XX  
XX Immunogenic; infection; vaccine; mycobacterial disease; tuberculosis;  
XX Crohn's disease; gene therapy; anti-inflammatory; antibacterial; hsp70;  
XX heat shock protein 70; PCR; primer; ss.  
XX  
OS Mycobacterium sp.  
XX  
XX WO200267982-A2.  
XX  
XX PD 06-SEP-2002.  
XX  
XX PF 20-FEB-2002; 2002WO-US005038.  
XX  
XX XX 20-FEB-2001; 2001US-0269801P.  
XX PR 29-MAY-2001; 2001US-0294170P.  
XX  
XX PA (SECU-) SEQUELTA INC.  
XX (YOUNG D B.  
XX (STEM/) STEWART G R.  
XX (OGAO/) O'GAORA P C E.  
XX  
XX PI Young DB, Stewart GR, O'gaora PCE;  
XX  
XX WPI; 2002-698637/75.  
XX

PT Immunogenic composition of mycobacterial mutants with modified protein  
PT production capabilities, useful for vaccinating and treating infectious  
PT in particular mycobacterial diseases such as tuberculosis and Crohn's  
PT disease.

PS Example 9; Page 29; 59pp; English.

CC The invention relates to an immunogenic composition of mycobacterial  
CC mutants with modified protein production capabilities. The invention also  
CC relates to methods for the treatment and prevention of infectious  
CC diseases. The methods and compositions of the invention are useful for  
CC vaccinating and treating infections in particular mycobacterial diseases  
CC such as tuberculosis and Crohn's disease. The invention is also used in  
CC gene therapy. The present sequence is a PCR primer used for amplifying  
CC Mycobacterium sp. hsp70 (heat shock protein 70) operon promoter. This  
CC sequence is used to illustrate the method of the invention

SQ Sequence 21 BP; 4 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1020 GGTCAAGCTGGCTGACT 1036  
3 GGTCAAGCTGGCTGACT 19

Db

RESULT 1696  
ABT06423/c  
ID ABT06423 standard; DNA; 21 BP.  
XX  
XX ABT06423;  
AC  
XX  
XX DT 07-NOV-2002 (first entry)  
XX  
XX DE Cyclin 14-3-3 sigma gene PCR primer #7.  
XX  
XX Human; methylated gene; methylation; breast cancer; marker; WT-1;  
XX cell proliferative disorder; TWIST; HOXA5; NBS-1; RABbeta; cyclin D2;  
XX retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;  
XX 14.3.3 sigma; HIN-1; RAS5F1a; tumour suppressor gene; hypermethylation;  
XX PCR; primer; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200259347-A2.  
XX  
XX PD 01-AUG-2002.  
XX  
XX PF 28-JAN-2002; 2002WO-US002455.  
XX  
XX PR 26-JAN-2001; 2001US-00771357.  
XX  
XX (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.  
XX  
XX PA Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Packler MU;  
XX  
XX PI WPI; 2002-599803/64.  
XX  
XX DR  
XX  
XX PT Diagnosing and/or determining a predisposition to a cellular  
XX proliferative disorder of breast tissue, in particular breast cancer, by  
XX PT determining the state of methylation of one or more nucleic acids  
XX PT isolated from the subject.  
XX  
XX PS Claim 12; Page 44; 115pp; English.  
XX  
XX The present invention relates to a method of diagnosing a cellular  
XX proliferative disorder of breast tissue, which involves determining the  
XX state of methylation of one or more nucleic acids isolated from the  
XX CC subject, where the state of methylation of the nucleic acids as compared  
XX with a state of methylation from a subject not having the cellular  
XX proliferative disorder of breast tissue is indicative of a cellular



CC proliferative disorder of breast tissue in the subject. The nucleic acids  
CC may be TWIST, HOXA5, NRS-1, retinoic acid receptor beta (RARbeta),  
CC oestrogen receptor, cyclin D2, Wilms' tumour gene (WT-1), 14.3.3 sigma,  
CC HIN-1 or RASSF1A. The method is useful for diagnosing and/or determining  
CC a predisposition to a cellular proliferative disorder, in particular  
CC breast cancer including ductal carcinoma in situ, lobular carcinoma,  
CC colloid carcinoma, tubular carcinoma, medullary carcinoma, metastatic  
CC carcinoma, intraductal carcinoma in situ, lobular carcinoma in situ and  
CC papillary carcinoma in situ. The present sequence is a primer used in the  
CC exemplification of the invention

SQ Sequence 21 BP; 3 A; 10 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 843 TGAGTACCTGACAAAG 859

Db 19 TGAGTACCGGAGAGG 3

RESULT 1697

ABS97470 ID ABS97470 standard; DNA; 21 BP.

XX ABS97470;

DT 23-DEC-2002 (first entry)

DE Human diazepam binding inhibitor (DBI) gene polymorphic sequence #14.

XX Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;  
KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;  
KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;  
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;  
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;  
KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;  
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;  
KW HMMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NMMT;  
KW NADPH quinone oxidoreductase 2; NQO2; sulfoxyltransferase thermolabile; STM;  
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;  
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; UPA;  
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;  
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;  
KW altered drug metabolism; cardiovascular function; colorectal tumour;  
KW central nervous system; pulmonary; immunological; SNP;  
KW single nucleotide polymorphism.

XX Homo sapiens.

OS WO200257410-A2.

XX 25-JUL-2002.

XX 28-NOV-2001; 2001WO-US044838.

XX 28-NOV-2000; 2000US-00724389.

XX (DNAS-) DNA SCI LAB INC.

XX Guida M, Hall J;

XX WPI; 2002-698522/75.

PT Isolated nucleic acid molecules having polymorphisms in known human genes  
PT e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers  
PT for locating, identifying and characterizing the genes responsible for  
PT disorder-related traits.

PS Example 9, Page 115, 714pp; English.

CC This invention relates to the sequence of an isolated nucleic acid  
CC molecule comprising at least one base variation from that of a known  
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),  
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1),  
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator  
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding  
CC inhibitor (DBI), epoxide hydrolase 2 (EPHX2), 5-lipoxygenase activating  
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl  
CC transferase (HMMT) [kallikrein 2] KLK2, nicotinamide-N-methyl  
CC transferase (NMMT), NADPH quinone oxidoreductase 2 (NQO2),  
CC sulfoxyltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4  
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl  
CC transferase (UGT2B15), urokinase receptor (UPA), multidrug resistance 1  
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3  
CC (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic  
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.  
CC The polymorphisms in the human genes cited in the invention are useful as  
CC genetic linkage markers for locating and characterizing the genes that  
CC are responsible for specific traits within the genome and eventually  
CC identifying the genes responsible for a variety of disorder-related  
CC traits as a result of their e.g., overexpression, constitutive  
CC expression, mutation or underexpression, which may be used in diagnosing  
CC and/or treating the disorders. The nucleic acid molecules comprising the  
CC polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1,  
CC ARNT, EPHX2, GST12, NMMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR,  
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug  
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2,  
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for  
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are  
CC used to screen for altered cardiovascular function, in COX2 for altered  
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central  
CC nervous system function, in FLAP and HMMT for altered pulmonary,  
CC immunological or haematological function, in KLK2 for altered serine  
CC protease activity in the prostate, in LTF for altered immunological or  
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and  
CC peripheral nervous system function. The present sequence represents a  
CC polymorphic DNA sequence of the invention

SQ Sequence 21 BP; 6 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 704 AGGAGTACGACTGAA 720

Db 5 AGGAGTACGACTGAA 21

RESULT 1698

ABK53783/C ID ABK53783 standard; DNA; 21 BP.

XX ABK53783;

XX 05-JUN-2002 (first entry)

XX DMS:acceptor oxidoreductase, PCR primer #29.

XX DMS:acceptor oxidoreductase; dimethyl sulphide; sulphoxide;  
KW prochiral organic sulphide; sulphoxide enantiomer; primer;  
KW chiral drug production; optically-active functional drug; ss.

XX Rhodovulum sulfidophilum.

OS WO200216570-A1.

XX 28-FEB-2002.

XX 21-AUG-2001; 2001WO-AU001033.

XX 21-AUG-2000; 2000AU-00009559.



```
PT enzyme/receptors of endothelin and endothelin converting enzyme signaling
PT system associated with cardiovascular disease, useful for treating the
PT disease.
XX
XX
PS Claim 1; Page 67; 190pp; English.
XX
CC The invention describes a polynucleotide (I) of the endothelin
CC (EDN)/endothelin converting enzyme (ECE)/receptors of EDN and ECE (EDNR)
CC signaling system which is associated with a cardiovascular disease. (I),
CC the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I)
CC or (II) is useful for producing cells capable of expressing a molecular
CC variant polypeptide which is associated with a cardiovascular disease.
CC (II), (III), the EDN, ECE or EDNR polypeptide, or a cell expressing a
CC molecular variant gene comprising (I) is useful for identifying and
CC obtaining a pro-drug or drug capable of modulating the activity of a
CC molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system
CC or its gene product, or for identifying and obtaining an inhibitor of the
CC activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE
CC signaling system or its gene product. The isolated proteins and
CC polynucleotides encoding them are useful for preparation of a
CC pharmaceutical composition for treating a cardiovascular disease such as
CC coronary heart disease, hypertension, atherosclerosis, or related to
CC abnormal angiogenesis or fatty acid metabolism e.g. diabetes and familial
CC hypercholesterolaemia. The gene or a polynucleotide fragment of the
CC EDN/ECE/EDNR signaling system are useful as forensic markers, for
CC creating a transgenic animal and in creation of a solid support
CC comprising polynucleotides, genes, vectors, polypeptides, antibodies or
CC host cells of the invention. This sequence represents a PCR primer used
CC to identify single nucleotide polymorphisms in DNA encoding
CC cardiovascular regulator proteins of the EDN/ECE/EDNR signaling pathway
XX
SQ Sequence 21 BP; 0 A; 9 C; 7 G; 5 T; 0 U; 0 Other;
Query Match
Best Local Similarity 0.8%; Score 13.8; DB 1; Length 21;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 361 GGGGAGAGTACCAGGC 377
DB 17 GGGCAGAGGACCAAGC 1
RESULT 1701
AB080134
ID AB080134 standard; DNA; 21 BP.
XX
AC AB080134;
XX
DT 13-JUN-2003 (first entry)
XX
DE Probe DBM0080P, identifies IL4R variant T2531.
XX
KW Human; interleukin 4 receptor; IL4R; type 1; diabetes; allele;
KW insulin dependent diabetes mellitus; IDDM; myasthenia gravis;
KW single nucleotide polymorphism; SNP; autoimmune disease;
KW T helper type 1 mediated disease; rheumatoid arthritis; probe;
KW multiple sclerosis; inflammatory bowel disease; systemic sclerosis;
KW systemic lupus erythematosus; psoriasis; scleroderma; Grave's disease;
KW Guillain-Barre syndrome; Hashimoto's thyroiditis; ss.
XX
OS Homo sapiens.
XX
MO2003010335-A2.
XX
PD 06-FEB-2003.
XX
PF 17-JUL-2002; 2002WO-EP007956.
XX
PR 20-JUL-2001; 2001US-0306912P.
XX
PA (HOFF) ROCHE DIAGNOSTICS GMBH.
XX
PA (HOFF) HOFFMANN LA ROCHE & CO AG F.
XX
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```
PI Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX
XX WPI; 2003-248086/24.
XX
PT Determining an individual's risk for type 1 diabetes, comprises detecting
PT the presence of an insulin dependent diabetes mellitus-associated
PT interleukin 4 receptor allele in a nucleic acid sample of the individual.
XX
XX Example 1; Page 32; 79pp; English.
XX
CC The sequences given in AB080119-35 represent probes which were used to
CC identify wild type and variant loci in the human interleukin 4 receptor
CC (IL4R). These probe sequences were used in the method of the invention
CC for determining an individual's risk for type 1 diabetes. The method
CC comprises detecting the presence of an insulin dependent diabetes
CC mellitus (IDDM)-associated interleukin 4 receptor allele in a nucleic
CC acid sample of the individual, where the presence of the allele indicates
CC the individual's risk for type 1 diabetes. The method identifies one or
CC more single nucleotide polymorphism (SNP) within the IL4R gene listed in
CC the specification. The method and the SNPs are useful for determining an
CC individual's risk for type 1 diabetes. The IL4R SNPs are also useful for
CC determining an individual's risk for any autoimmune disease or condition
CC or any T helper type 1 mediated disease, e.g. rheumatoid arthritis,
CC multiple sclerosis, inflammatory bowel disease, systemic lupus
CC erythematosus, psoriasis, scleroderma, Grave's disease, systemic
CC sclerosis, myasthenia gravis, Guillain-Barre syndrome, or Hashimoto's
CC thyroiditis
XX
SQ Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
Query Match
Best Local Similarity 0.8%; Score 13.8; DB 1; Length 21;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1175 TCTTCTAGAGATGCC 1191
DB 2 TCTTCTAGAGATGCC 18
RESULT 1702
AB080161
ID AB080161 standard; DNA; 21 BP.
XX
AC AB080161;
XX
DT 13-JUN-2003 (first entry)
XX
DE Probe DBM0080P, identifies wild type IL4R SNP #8.
XX
KW Human; interleukin 4 receptor; IL4R; type 1; diabetes; allele;
KW insulin dependent diabetes mellitus; IDDM; myasthenia gravis;
KW single nucleotide polymorphism; SNP; autoimmune disease;
KW T helper type 1 mediated disease; rheumatoid arthritis; probe;
KW multiple sclerosis; inflammatory bowel disease; systemic sclerosis;
KW systemic lupus erythematosus; psoriasis; scleroderma; Grave's disease;
KW Guillain-Barre syndrome; Hashimoto's thyroiditis; ss.
XX
OS Homo sapiens.
XX
MO2003010335-A2.
XX
PD 06-FEB-2003.
XX
PF 17-JUL-2002; 2002WO-EP007956.
XX
PR 20-JUL-2001; 2001US-0306912P.
XX
PA (HOFF) ROCHE DIAGNOSTICS GMBH.
XX
PA (HOFF) HOFFMANN LA ROCHE & CO AG F.
XX
PI Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX
XX WPI; 2003-248086/24.
XX
```

XX Determining an individual's risk for type 1 diabetes, comprises detecting  
PT the presence of an insulin dependent diabetes mellitus-associated  
PT interleukin 4 receptor allele in a nucleic acid sample of the individual.  
XX Example 4; Page 36; 79pp; English.  
XX  
XX The sequences given in AB080153-69 represent probes which were used to  
CC identify wild type and variant loci in the human interleukin 4 receptor  
CC (IL4R). These probe sequences were used in the method of the invention  
CC for determining an individual's risk for type 1 diabetes. The method  
CC comprises detecting the presence of an insulin dependent diabetes  
CC mellitus (IDDM)-associated interleukin 4 receptor allele in a nucleic  
CC acid sample of the individual, where the presence of the allele indicates  
CC the individual's risk for type 1 diabetes. The method identifies one or  
CC more single nucleotide polymorphism (SNP) within the IL4R gene listed in  
CC the specification. The method and the SNP's are useful for determining an  
CC individual's risk for type 1 diabetes. The IL4R SNP's are also useful for  
CC determining an individual's risk for any autoimmune disease or condition  
CC or any T helper type 1 mediated disease, e.g. rheumatoid arthritis,  
CC multiple sclerosis, inflammatory bowel disease, systemic lupus  
CC erythematosus, psoriasis, scleroderma, Grave's disease, systemic  
CC sclerosis, myasthenia gravis, Guillain-Barre syndrome, or Hashimoto's  
CC thyroiditis  
CC  
XX Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;  
SQ  
XX  
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1175 TCTTCTATGAGATGCC 1191  
DB 2 TCTTCTGATGATGCC 18  
XX  
XX RESULT 1703  
AAL53951  
ID AAL53951 standard; DNA; 21 BP.  
XX  
XX AAL53951;  
XX  
XX 18-FEB-2003 (first entry)  
XX  
XX Human papillomavirus probe, SEQ ID NO 1.  
XX  
XX Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
XX single nucleotide polymorphism; probe; ss.  
XX  
XX Human papillomavirus.  
XX  
XX US2002142308-A1.  
XX  
XX 03-OCT-2002.  
XX  
XX 30-MAR-2001; 2001US-00823634.  
XX  
XX 30-MAR-2001; 2001US-00823634.  
XX  
XX (DAT) / DATA Gupta N.  
XX (TSEN) / TSEN T.  
XX  
XX Data Gupta N, Tseng T;  
XX  
XX WPI; 2003-102506/09.  
XX  
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
XX Example 1; Page 12; 26pp; English.  
XX

CC The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as *Acetobacter*, *Bacillus*, *Candida*,  
CC *Enterococcus*, *Haemophilus*, *Mycobacterium* and *Streptococcus*, and viruses.  
CC This polynucleotide sequence represents a probe relating to the mutation  
CC detecting method of the invention  
XX  
XX Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
SQ  
XX  
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1677 CCCCACACTACATCTCC 1693  
DB 4 CCGTACTACATCTTCC 20  
XX  
XX RESULT 1704  
ADC51528/C  
ID ADC51528 standard; DNA; 21 BP.  
XX  
XX ADC51528;  
XX  
XX 18-DEC-2003 (first entry)  
XX  
XX Potential matrix metalloproteinase-2 activation related primer seq id 13.  
XX  
XX vasotrophic; cytosolic; potential matrix metalloproteinase-2; proMMP-2;  
XX membrane type matrix metalloproteinases; MT-MMP; neovascularisation;  
XX cancer; human; claudin 1; ss; primer.  
XX  
XX Synthetic.  
XX  
XX JP2003000249-A.  
XX  
XX 07-JAN-2003.  
XX  
XX 10-MAY-2001; 2001JP-00140296.  
XX  
XX 10-MAY-2001; 2001JP-00140296.  
XX  
XX (FUJY ) FUJI PHARM IND CO LTD.  
XX (KANAWA) KANAWA DAIKAKUCHO.  
XX  
XX WPI; 2003-472918/45.  
XX  
XX Activation of potential matrix metalloproteinase-2 (proMMP-2) with claudins  
PT via membrane type matrix metalloproteinases (MT-MMPs).  
XX  
XX Example 3; SEQ ID NO 31; 49pp; Japanese.  
XX  
XX The invention describes the activation of potential matrix  
CC metalloproteinase-2 (proMMP-2) with claudins via membrane type matrix  
CC metalloproteinases (MT-MMP). Activated proMMP-2 is useful for treatment of  
CC neovascularisation and cancer. This sequence represents a potential  
CC matrix metalloproteinase-2 activation associated primer. Note: This  
CC sequence is given in the specification as seq id 13.  
XX  
XX Sequence 21 BP; 1 A; 6 C; 7 G; 7 T; 0 U; 0 Other;  
SQ  
XX  
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX

QY 453 CACTGAGACATCAACA 469  
| | | | | | | | | |  
Db 18 CACGAGACATCCACA 2

RESULT 1705  
ADCT2204/c  
ID ADC72204 standard; RNA; 21 BP.  
XX  
AC ADC72204;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Human stearyl coenzyme A desaturase 4 siRNA Desat3-antisense.  
XX  
KW p53 pathway modulating agent; stearyl coenzyme A desaturase; SCD;  
KW p53 gene; cancer; signal integrator; DNA damage; hypoxia;  
KW nucleotide deprivation; oncogene activation; cytoskeletal; gene therapy;  
KW defective p53 function; angiogenic; apoptotic;  
KW cell proliferative disorder; human; small interfering RNA; siRNA; ss;  
KW Desat3-antisense.  
XX  
OS Homo sapiens.  
XX  
PN WO2003074662-A2.  
XX  
PD 12-SEP-2003.  
XX  
PF 28-FEB-2003; 2003WO-US006087.  
XX  
PR 01-MAR-2002; 2002US-0361196P.  
XX  
PA (EXRL-) EXELIXIS INC.  
XX  
PI Belvin M, Francis-Lang H, Friedman L, Plowman GD, Heuer TS;  
XX  
DR WPI; 2003-748276/70.  
XX  
PT Identifying a candidate p53 pathway-modulating agent as therapeutic  
PT targets for disorders related to defective p53 function e.g. cancer by  
PT contacting an assay system having SCD polypeptide or nucleic acid, with a  
PT test agent.  
XX  
XX  
PS Example 6; SEQ ID NO 30; 44bp; English.  
XX  
CC This invention relates to a novel method of identifying candidate p53  
CC pathway modulating agent which comprises contacting an assay system  
CC comprising stearyl coenzyme A desaturase (SCD) polypeptide or nucleic  
CC acid, or their functionally active fragment or derivative, with a test  
CC agent under conditions where, but for the presence of the test agent, the  
CC system provides a reference activity. The p53 gene is mutated in over 50  
CC different types of human cancers and is believed to be the most commonly  
CC mutated gene in human cancer. The human p53 protein normally functions as  
CC a central integrator of signals including DNA damage, hypoxia, nucleotide  
CC deprivation and oncogene activation. Modulators of p53 may have  
CC cytoskeletal activity or be useful in gene therapy. The methods of the  
CC invention are useful for identifying modulators of the p53 pathway as  
CC therapeutic targets for disorders associated with defective p53 function,  
CC such as angiogenic, apoptotic or cell proliferative disorders, for  
CC example cancer. The modulators are useful as research reagents,  
CC diagnostics and therapeutics. The present sequence (Desat3-antisense) is  
CC that of a human Stearyl-CoA desaturase 4 sequence (see ) small  
CC interfering RNA (siRNA) used in the exemplification of the invention.  
XX  
SQ Sequence 21 BP; 5 A; 6 C; 4 G; 0 T; 4 U; 2 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 71.4%; Pred. No. 1.1e+03;  
Matches 15; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 1637 GGCAGCGGCTGAGGAGTACC 1657  
: : | | | | | | | | | |

Db 21 RRCATGCTCTGAGGATGTC 1

RESULT 1706  
ADP53070/c  
ID ADP53070 standard; DNA; 21 BP.  
XX  
AC ADP53070;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE Variant detecting primer extension mutant product oligo, SEQ ID No 26.  
XX  
KW variant detection; primer extension assay; mutation; cancer;  
KW heterogeneous; sporadic mutation; genotyping; pooled sample; mutant; ss.  
XX  
OS Unidentified.  
XX  
PN WO2003071252-A2.  
XX  
PD 28-AUG-2003.  
XX  
PF 18-FEB-2003; 2003WO-US004827.  
XX  
PR 15-FEB-2002; 2002US-0357585P.  
XX  
PA (EXAC-) EXACT SCI CORP.  
XX  
PI Shuber AP, Kann L, Whitney D;  
XX  
DR WPI; 2003-697649/66.  
XX  
PT Detecting a variant in a primer extension assay, useful for analyzing  
PT molecular events for identifying mutations indicative of cancer, by  
PT contacting a target nucleic acid primer complementary to a region of the  
PT target nucleic acid.  
XX  
XX  
PS Example 3; SEQ ID NO 26; 54bp; English.  
XX  
CC The invention relates to a novel method for detecting a variant in a  
CC primer extension assay, useful for analyzing molecular events for  
CC identifying mutations indicative of cancer, by contacting a target  
CC nucleic acid primer complementary to a region of the target nucleic acid.  
CC Detecting a variant in a primer extension assay comprises contacting a  
CC target nucleic acid primer complementary to a region of the target  
CC nucleic acid, and extending the primer in the presence of a first  
CC nucleotide that is complementary to a first variant nucleotide suspected  
CC to be at a position downstream of the region and a second nucleotide that  
CC is complementary to a second variant nucleotide at the position, thus to  
CC reduce misincorporation of the first nucleotide on a template comprising  
CC the second variant nucleotide. The methods are useful for analyzing  
CC molecular events for identifying individuals with mutations indicative of  
CC cancer. They are particularly useful in detecting a rare mutation in a  
CC heterogeneous biological sample (e.g. sporadic mutation in a  
CC heterogeneous patient sample), detecting rare genotypes in genotyping  
CC reactions (e.g. viral genotyping reactions), or detecting mutant or viral  
CC sequences in pooled samples (e.g. detecting polymorphisms or inherited  
CC sequence variations in pooled patient samples). This polynucleotide  
CC sequence represents an oligo used as part of the primer extension assay  
CC of the invention.  
XX  
SQ Sequence 21 BP; 8 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 863 TGAAGCAGTACTGAT 879  
| | | | | | | | | |  
Db 17 TGAAGAACTTCTTGAT 1

RESULT 1707

AD74696  
ID ADF74696 standard; DNA; 21 BP.  
XX  
AC ADF74696;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Rat nestin PCR primer (SeqID 22).  
XX  
KW primer; rat; ss; differentiation status; anti-gene strategy; decoy DNA;  
KW cis-element specific; viral protection; apoptosis;  
KW muscle differentiation; gene therapy; CNS disorder;  
KW neurodegenerative disease; traumatic brain injury; neuroprotective;  
KW septamer; PCR.  
XX  
OS Rattus sp.  
XX  
PN US2003170736-A1.  
XX  
PD 11-SEP-2003.  
XX  
PF 31-JAN-2002; 2002US-00059273.  
XX  
PR 31-JAN-2001; 2001US-0265113P.  
XX  
PA (AGOS/) AGOSTON D V.  
XX  
PI Agoston DV;  
XX  
DR WPI; 2003-863755/80.  
XX  
PT Altering the differentiation status of cells using a nucleic acid is  
PT useful to differentiate neural progenitor cells from stem cells for use  
PT in the treatment of diseases, particularly neurodegenerative disease.  
XX  
PS Example 7; SEQ ID NO 22; 36pp; English.  
XX  
CC This invention relates to a novel methods and compositions for altering  
CC the differentiation status of cells, for example stem and progenitor  
CC cells. Specifically, it refers to an anti-gene strategy for gene transfer  
CC and transcriptional studies that comprises the transfection of a decoy  
CC DNA molecule i.e. a cis-element specific dsDNA molecule that has been  
CC designed to contain a binding site for a transcription factor of  
CC interest. In particular, this binding site comprises a novel 7-mer  
CC (TTTGCAT), identified as a septamer, which is present within the  
CC regulatory regions of some neuronal and glial specific genes. As such,  
CC the present invention describes highly specific functional studies, as  
CC well as therapeutic agents for blocking viral protection, tumour growth,  
CC apoptosis, muscle differentiation and modulating the neuronal response to  
CC various stimuli. Furthermore, through using gene therapy, the  
CC compositions of this invention can be useful to treat CNS disorders,  
CC particularly neurodegenerative diseases or traumatic brain injuries, and  
CC accordingly are described as having neuroprotective activity. This  
CC oligonucleotide sequence is a rat nestin PCR primer of the invention.  
XX  
SQ Sequence 21 BP; 2 A; 5 C; 6 G; 8 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX  
DE Human DNA probe used to immobilise CpG methylated DNA SeqID 225.  
XX  
KW probe; ss; chemical modification; methylation; array; CpG island;  
KW tumour suppressor; p16; human; H69; H1618.  
XX  
OS Homo sapiens.  
XX  
PN US2003152950-A1.  
XX  
PD 14-AUG-2003.  
XX  
PF 27-JUN-2002; 2002US-00184085.  
XX  
PR 27-JUN-2001; 2001US-0301370P.  
XX  
PA (GARN/) GARNER H R.  
PA (MINN/) MINNA J D.  
PA (LUEB/) LUEBKE K J.  
PA (BALO/) BALOG R P.  
XX  
PI Garner HR, Minna JD, Luebke KJ, Balog RP;  
XX  
DR WPI; 2003-874843/81.  
XX  
PT Analysis of chemical modification of DNA involves obtaining sample of DNA  
PT to be analyzed, treating DNA with chemical reagents that result in  
PT different base sequences, and determining sequence of resulting DNA.  
XX  
PS Example 1; SEQ ID NO 225; 210pp; English.  
XX  
CC This invention relates to a novel method for analysing chemically  
CC modified macromolecules. Specifically, it refers to a high throughput  
CC method for the parallel analysis of many potential sites of chemical  
CC modification (e.g. methylation) in DNA. The present invention describes  
CC treating the DNA with one or more chemical reagents that result in  
CC different base sequences depending upon the presence or absence of the  
CC modification of interest. Accordingly, a device comprising an array of  
CC probes is provided to hybridise with and select the altered DNA sequences  
CC that comprise the modifications of interest such as a CpG island. In  
CC particular, this invention refers to analysing the methylation pattern of  
CC a region of the promoter for the tumour suppressor gene p16 from two  
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence  
CC is a human DNA probe used to immobilise CpG methylated DNA of the  
CC invention.  
XX  
SQ Sequence 21 BP; 6 A; 13 C; 0 G; 2 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX  
OY 226 GAGAGTGTGTGTGTGTG 242  
DB 21 GGAGTGTGTGTGTGTG 5

RESULT 1709  
ADM67942/c  
ID ADM67942 standard; DNA; 21 BP.  
XX  
AC ADM67942;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE Oligonucleotide STAR-4 - N+1 reverse ligation primer.  
XX  
KW nucleic acid amplification; antimitigaine; analgesic; l-nucleic acid;  
KW CGRP antagonist; calcitonin gene-related peptide; amylin; pain;  
KW drug design; primer; ss.  
XX  
OS Synthetic.  
XX





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PF 04-JUL-2003; 2003WO-FI000544.
XX
XX 05-JUL-2002; 2002FI-00001325.
XX
XX (VALM ) VALTION TEKILLINEN TUTKIMUSKESKUS.
XX
XX Soederlund H, Satokari R, Kataja K, Takkinen K;
XX
XX WPI; 2004-142984/14.
XX
XX Determining amounts or relative proportions of individual polynucleotide
XX or subgroups in polynucleotide mixture using mixture of polynucleotide
XX probe having approximately same length, useful in health care, food
XX industry.
XX
XX Example 6; SEQ ID NO 9; 82pp; English.
XX
XX The invention relates to determining (M1) amounts or relative proportions
XX of polynucleotide sequence or subgroups of it in polynucleotide mixture,
XX by allowing hybridization reaction to take place between surplus of
XX soluble polynucleotide probes having approximately same number of
XX hybridizing nucleotides and resolution enabling tags, recovering of
XX quantitatively hybrids, recording amount or relative proportions of
XX distinguishable polynucleotide probes. (M1) is useful for determining
XX amounts or relative proportions of polynucleotide sequence or subgroups
XX of it in polynucleotide mixture. (M1) is useful for determining
XX variations in the amount of more than one polynucleotide sequence in a
XX mixture with using (M1) for assessing hygienic conditions and
XX epidemiologic situations, effects of external stimuli or treatment
XX modalities microbial population. (M1) is useful in health care,
XX environmental research, pharmaceutical industry and food industry, and
XX are applicable for many other diagnostic, biotechnical and scientific
XX purposes. (M1) provides demonstration of differences in the expression of
XX non-homologous, allelic genes in a chromosome and may explain the reasons
XX for different manifestation of certain diseases. (M1) allows simultaneous
XX determination of amounts or relative proportions of more than one
XX individual target polynucleotide sequence present in polynucleotide
XX mixture. (M1) is made very sensitive and allow quantitative detection of
XX polynucleotide sequences present in diminutive amounts. Sequences
XX AD134808-AD134817 represent PCR primers used for generating probes
XX specific for the various S. cerevisiae genes YAL054c-ACS1, YCR05c-CIT2,
XX YMR083w-ADH3, YBL015w-ACH1, YFL039c-ACT1.
XX
XX Sequence 21 BP; 6 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1529 AGCTACAAAAGGAGGCC 1545
DB 2 AGCTACCAAGGTGGCC 18

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XX
XX 08-MAR-2002; 2002JP-00064373.
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
XX fragment from another set of sequences, or for detecting single
XX nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 3396; 2627pp; Japanese.
XX
XX The present invention relates to a polynucleotide isolated from a human
XX gene and is useful for detecting a single nucleotide polymorphism in a
XX human gene or for diagnosing of disease. The invention enables the
XX detection of a single nucleotide polymorphism in a human gene. The
XX present sequence represents a primer of the invention.
XX
XX Sequence 21 BP; 1 A; 6 C; 5 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1554 GCTTCGTGATGCTG 1570
DB 5 GCTTCCTGATGCTG 21

```

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RESULT 1713
ADMT4772
ID ADM74772 standard; DNA; 21 BP.
XX
XX ADM74772;
AC
XX 03-JUN-2004 (first entry)
DT
XX Zg-lectin protein related primer, JLR3.
DE
XX Zg-lectin; primer; ss.
XX
XX Unidentified.
OS
XX CN1459503-A.
XX
XX 03-DEC-2003.
PD
XX 23-MAY-2002; 2002CN-00111817.
XX
XX 23-MAY-2002; 2002CN-00111817.
PR
XX 23-MAY-2002; 2002CN-00111817.
PA (UYFU-) UNIV FUDAN.
XX
XX Tang K, Kai G, Sun X;
XX
XX WPI; 2004-157678/16.
DR
XX
XX Julian agglutinin protein and its code sequence.
PT
XX
XX Example 1; Page 9; 19pp; Chinese.
XX
XX The invention relates to a novel Zg-lectin protein. The invention further
XX relates to the Zg-lectin protein coding sequence, the preparing process
XX of the said protein and its nucleic acid sequence, and a method for
XX detecting its nucleic acid sequence and polypeptide from a specimen. This
XX polynucleotide sequence represents a primer used in the exemplification
XX of the invention.
XX
XX Sequence 21 BP; 7 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;

```



Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 606 ACTGAGACCTAATTA 622  
|||||  
Db 1 ACTGACATCATCATTA 17

## RESULT 1714

ADM28979  
ADM28979 standard; DNA; 21 BP.

AC ADM28979;

DT 17-JUN-2004 (first entry)

DE Human IL4R polymorphism identification probe SEQ ID NO:18.

XX Type 1 diabetes; detection; polymorphism; interleukin 4; IL4;  
KW interleukin 13; IL13; immunology; molecular biology; autoimmune disease;  
KM multiple sclerosis; myasthenia gravis; ulcerative colitis;  
KW pernicious anaemia; rheumatoid arthritis; systemic lupus erythematosus;  
KM inflammatory bowel disease; human; interleukin 4 receptor; IL4R; probe;  
XX ss; single nucleotide polymorphism; SNP; chromosome 16.

OS Homo sapiens.  
XX Synthetic.

PN EPI405921-A1.

PD 07-APR-2004.

PF 01-OCT-2003; 2003EP-00022242.

PR 04-OCT-2002; 2002US-00264965.

PR 08-OCT-2002; 2002US-00267844.

PA (HOPE ) ROCHE DIAGNOSTICS GMBH.

PA (HOPE ) HOFFMANN LA ROCHE & CO AG F.

PI Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;

DR WPI; 2004-318714/30.

PT Detecting an individual's risk for autoimmune diseases, in particular

PT type 1 diabetes, by determining sequence variants or polymorphisms

PT present at the IL-4 and IL-13 loci.

XX Example 1, SEQ ID NO 18; 168bp; English.

XX The present invention describes a method for determining an individual's  
CC risk for type 1 diabetes. The method comprises detecting the presence of  
CC a type 1 diabetes-associated polymorphism in the interleukin 4 (IL4) or  
CC IL13 loci in a nucleic acid sample of the individual, where the presence  
CC of the polymorphism indicates the individual's risk for type 1 diabetes.  
CC The human IL4 and IL13 genes are located on chromosome 5. Also described  
CC is a kit for determining an individual's risk for type 1 diabetes,  
CC comprising one or more sequence-specific oligonucleotide each  
CC individually comprising a sequence that hybridises under stringent  
CC conditions to a type 1 diabetes-associated IL4 or IL13 polymorphism, and  
CC instructions to use the kit to determine the individual's risk for type 1  
CC diabetes. Detection of one or more IL4 or IL13 polymorphisms in a nucleic  
CC acid sample of an individual, is useful for the determination of the  
CC individual's risk for type 1 diabetes. The methods and compositions of  
CC the present invention are also useful in the field of immunology and  
CC molecular biology, in particular for detecting an individual's risk for  
CC autoimmune diseases, such as multiple sclerosis, myasthenia gravis,  
CC ulcerative colitis, pernicious anaemia, rheumatoid arthritis, systemic  
CC lupus erythematosus and inflammatory bowel disease. The present sequence  
CC represents a probe used in the identification of human IL4 receptor  
CC (IL4R) polymorphisms, which is used in the exemplification of the present  
CC invention. The human IL4R gene is located on chromosome 16.

XX Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 1.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1175 TCTTCTATGAGATGCC 1191  
|||||  
Db 2 TCTTCTGAGATGCC 18

## RESULT 1715

ADM29006  
ADM29006 standard; DNA; 21 BP.

AC ADM29006;

DT 17-JUN-2004 (first entry)

DE Human IL4R wild type allele related probe SEQ ID NO:45.

XX Type 1 diabetes; detection; polymorphism; interleukin 4; IL4;  
KW interleukin 13; IL13; immunology; molecular biology; autoimmune disease;  
KM multiple sclerosis; myasthenia gravis; ulcerative colitis;  
KW pernicious anaemia; rheumatoid arthritis; systemic lupus erythematosus;  
KM inflammatory bowel disease; human; interleukin 4 receptor; IL4R; probe;  
XX ss; single nucleotide polymorphism; SNP; chromosome 16.

OS Homo sapiens.  
XX Synthetic.

PN EPI405921-A1.

PD 07-APR-2004.

PF 01-OCT-2003; 2003EP-00022242.

PR 04-OCT-2002; 2002US-00264965.

PR 08-OCT-2002; 2002US-00267844.

PA (HOPE ) ROCHE DIAGNOSTICS GMBH.

PA (HOPE ) HOFFMANN LA ROCHE & CO AG F.

PI Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;

DR WPI; 2004-318714/30.

PT Detecting an individual's risk for autoimmune diseases, in particular

PT type 1 diabetes, by determining sequence variants or polymorphisms

PT present at the IL-4 and IL-13 loci.

XX Disclosure; SEQ ID NO 45; 168bp; English.

XX The present invention describes a method for determining an individual's  
CC risk for type 1 diabetes. The method comprises detecting the presence of  
CC a type 1 diabetes-associated polymorphism in the interleukin 4 (IL4) or  
CC IL13 loci in a nucleic acid sample of the individual, where the presence  
CC of the polymorphism indicates the individual's risk for type 1 diabetes.  
CC The human IL4 and IL13 genes are located on chromosome 5. Also described  
CC is a kit for determining an individual's risk for type 1 diabetes,  
CC comprising one or more sequence-specific oligonucleotide each  
CC individually comprising a sequence that hybridises under stringent  
CC conditions to a type 1 diabetes-associated IL4 or IL13 polymorphism, and  
CC instructions to use the kit to determine the individual's risk for type 1  
CC diabetes. Detection of one or more IL4 or IL13 polymorphisms in a nucleic  
CC acid sample of an individual, is useful for the determination of the  
CC individual's risk for type 1 diabetes. The methods and compositions of  
CC the present invention are also useful in the field of immunology and  
CC molecular biology, in particular for detecting an individual's risk for  
CC autoimmune diseases, such as multiple sclerosis, myasthenia gravis,  
CC ulcerative colitis, pernicious anaemia, rheumatoid arthritis, systemic  
CC lupus erythematosus and inflammatory bowel disease. The present sequence  
CC represents a probe for the wild type allele of human IL4 receptor (IL4R),  
CC which is used in the exemplification of the present invention. The human

CC	IL4R gene is located on chromosome 16.
XX	
XX	Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
QY	Query Match                      0.8%; Score 13.8; DB 1; Length 21; Best Local Similarity    88.2%; Pred. No. 1.1e+03; Matches    15; Conservative    0; Mismatches    2; Indels        0; Gaps        0;
DB	1175 TCTTCTATGAGATGGCC 1191       2 TCTTCTGTGAGATGCC 18
RESULT 1716	
ID	ADP86504/c
XX	ADP86504 standard; DNA; 21 BP.
AC	ADP86504;
XX	
DT	12-AUG-2004 (first entry)
DE	Gelatinase related PCR anti-sense primer. seq id 25.
KM	Antiinflammatory; vulnereary; haemostatic; dermatological; inhibitor;
KM	potentiator; promoter; gelatinase; haematopoietic cell;
KM	bone marrow transplantation; drugs; cosmetic; wound healing;
KX	Inflammation; dermatitis; sensitivity disease; regeneration medicine;
KX	PCR; primer; ss.
OS	Unidentified.
PN	WO2004042056-A1.
PD	21-MAY-2004.
PF	06-NOV-2003; 2003WO-JP014161.
PR	06-NOV-2002; 2002JP-00322925. 06-OCT-2003; 2003JP-00346463.
PA	(HAYB ) HAYASHIBARA SEIBUTSU KAGAKU.
PI	Takeuchi M, Okura T, Tatefuji T, Mori T, Ohta T, Kurimoto M;
DR	WPI; 2004-400680/37.
PT	Physiologically-active polypeptides, encoded polynucleotides and
PT	antibodies for controlling expression of gelatinase in mammalian skin
PT	cells or proliferation of hematopoietic cells, applicable in drugs and
PT	cosmetics.
XX	
XX	Example 1; SEQ ID NO 25; 129pp; Japanese.
XX	
CC	The invention relates to a polypeptide involved in controlling the
CC	expression of gelatinase. The polypeptide of the invention comprises a
CC	partial amino acid sequence of 3 defined amino acid sequences given in
CC	the specification. Further disclosed is a DNA encoding the polypeptide.
CC	Methods of the invention include using the polypeptides for potentiating
CC	gelatinase expression in mammalian skin cells, treating wounds, promoting
CC	haematopoietic cells for bone marrow transplantation, inhibiting or
CC	excessive expression of gelatinase in mammalian skin cells, diagnosing or
CC	treating diseases accompanying excessive expression of gelatinase. The
CC	polypeptides, their encoded polynucleotides and antibodies are for
CC	controlling the expression of gelatinase in mammalian skin cells or
CC	proliferation of haematopoietic cells, which are applicable in drugs,
CC	cosmetics and reagents including for healing wounds, as well as treating
CC	inflammation like dermatitis and sensitivity disease, and promoting
CC	growth of haematopoietic cells in regeneration medicine. The current
CC	sequence represents a gelatinase related PCR primer.
XX	
XX	Sequence 21 BP; 5 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

	Query Match	0.8%;	Score 13.8;	DB 1;	Length 21;	
	Best Local Similarity	88.2%;	Pred. No. 1.1e+03;			0;
	Matches 15;	Conservative 0;	Mismatches 2;	Indels 0;	Gaps 0;	
OY	89 GCTCTGAGGTTCCTCCG	105				
Dd	21 GCTCTGAGGTTCCTCCG	5				
	<hr/>					
	RESULT 1717					
	ADP71076/c					
	ID ADP71076 standard; DNA; 21 BP.					
XX	ADP71076:					
AC						
XX	23-SEP-2004 (first entry)					
DT						
DE	Mutant human IL-10 plasmid construction related PCR primer SEQ ID NO:40.					
XX						
KW	mutant interleukin 10; mutant IL-10; mutant IL-6; mutant interleukin 6;					
KV	gram-positive bacterium; lactic acid bacterium; protein purification;					
KX	human; IL-10; PCR; primer; ss.					
XX						
OS	Homo sapiens.					
XX	Synthetic.					
PN	MO2004056850-A2.					
XX						
PD	08-JUN-2004.					
XX						
PF	18-DEC-2003; 2003WO-BP051050.					
XX						
PR	19-DEC-2002; 2002EP-00080625.					
XX						
PA	(VIHV-) VTB VZM.					
PA	(UYGE-) UNIV GENT.					
XX						
PI	Steidler L, Neirynck S;					
XX						
DR	WPI, 2004-500277/47.					
XX						
PT	New mutant protein with improved secretion in a gram-positive bacterium					
PT	without affecting biological activity, useful in improving yield and					
PT	facilitating downstream processing for protein purification.					
XX						
PS	Example 1; SEQ ID NO 40; 34pp; English.					
XX						
CC	The present invention describes a mutant interleukin 10 (IL-10) or IL-6					
CC	protein which shows improved secretion in a gram-positive bacterium,					
CC	where one or more proline residues within the first 10 amino acids of the					
CC	mature protein have been replaced by another amino acid. Also described:					
CC	(1) a nucleic acid encoding a mutant IL-10 or IL-6 protein; and (2) an					
CC	expression vector for gene expression in a gram-positive bacterium					
CC	comprising the nucleic acid. The gram-positive bacterium is a lactic acid					
CC	bacterium, comprising Lactococcus lactis, Lactococcus salivarius or					
CC	Lactococcus acidophilus. The mutant IL-10 or IL-6 protein can be used for					
CC	improving yield and facilitating downstream processing for protein					
CC	purification. The present sequence represents a PCR primer used in the					
CC	construction of a plasmid comprising a lactic acid bacteria codon					
CC	optimised mature human IL-10, which is used in an example from the					
CC	present invention.					
XX						
SI	Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;					
	Query Match	0.8%;	Score 13.8;	DB 1;	Length 21;	
	Best Local Similarity	88.2%;	Pred. No. 1.1e+03;			
	Matches 15;	Conservative 0;	Mismatches 2;	Indels 0;	Gaps 0;	
OY	842 TTGAGTACTTGACAGCAG 858					
Dd	21 TTGAGTACTTGACAGCAG 5					

```

RESULT 1718
ID AAL41783
XX AAL41783 standard; DNA; 15 BP.
AC AAL41783;
XX
DT 25-APR-2002 (first entry)
XX
DE Human MC2R gene ASO primer SEQ ID NO: 32.
XX
KW Human; melanocortin 2 receptor (adrenocorticotrophic hormone); MC2R;
KW primer; haplotype; familial glucocorticoid deficiency; FGD; cancer;
KW chromosome 18q11.2; SNP; single nucleotide polymorphism; ss.
XX
OS Homo sapiens.
XX
PN WO200202821-A1.
XX
PD 10-JAN-2002.
XX
PF 29-JUN-2001; 2001WO-US021064.
XX
PR 30-JUN-2000; 2000US-0215330P.
XX
PA (GENA-) GENA1555 PHARM INC.
XX
PI Kazemi A, Koshy B, Lee HH, Sausker EA;
XX
DR WPI; 2002-171650/22.
XX
PT Melanocortin 2 receptor (MC2R) gene polymorphic variants, useful e.g. in
PT studying the expression and function of MC2R and screening candidate
PT drugs for treating familial glucocorticoid deficiency and cancer.
XX
PS Claim 16; Page 14; 79pp; English.
XX
CC The present invention provides the gene, protein and cDNA sequences of
CC the human melanocortin 2 receptor (adrenocorticotrophic hormone) (MC2R).
CC Also identified are a number of single nucleotide polymorphisms (SNPs)
CC found within the sequences. The sequences can be used to find the
CC haplotype of the MC2R gene in an individual and to identify drugs for the
CC treatment of cancer and familial glucocorticoid deficiency. The present
CC sequence is an allele specific primer for the gene of the invention.
CC which is found on chromosome 18q11.2
XX
SQ Sequence 15 BP; 2 A; 4 C; 5 G; 3 T; 0 U; 1 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 8.7e+02;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 292 CGTTCTGACGGGG 305
Db 1 CGTTCTGACGGGK 14
XX
RESULT 1719
AAQ06909
ID AAQ06909 standard; DNA; 20 BP.
XX
AC AAQ06909;
XX
DT 09-JAN-2003 (revised)
DT 05-MAR-1991 (first entry)
XX
DE MY4B nucleotide constituent of gag gene of HIV-1 Bru, -Mal or -Eli, HIV-
DE 2 ROD and SIV-MAC.
XX
KW HIV-1; HIV-2; SIV; AIDS; anti-sense nucleotide; ss.
XX
OS Human immunodeficiency virus.
OS Simian immunodeficiency virus.
XX

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PN EP403333-A.
XX
PD 19-DEC-1990.
XX
PF 05-JUN-1990; 90EP-00401520.
XX
PR 20-SEP-1989; 89PR-00012371.
XX
PA (INSP ) INST PASTEUR.
PA (INRM ) INSERM INST NAT SANTE RE.
XX
PI Moncany M, Montagnier L;
XX
DR WPI; 1990-378039/51.
XX
PT New nucleotide sequences derived from genome of HIV-1, HIV-2 and SIV -
PT useful as primers for amplification of immuno-deficiency viruses in
PT diagnosis and for raising antibodies in treatment of HIV infections.
XX
PS Claim 2; Page 18; 24pp; French.
XX
CC This nucleotide sequence is found in posn. 1388-1369 of HIV-1 Bru, 1421-
CC 1403 of HIV-1 Mal, 1388-1369 of HIV-Eli, 1706-1687 of HIV-2 ROD and 1670-
CC 1651 of SIV-MAC. It is the anti-sense strand of a primer pair used to
CC amplify these HIV-1, HIV-2 and SIV viral sequences, esp. in conjunction
CC with in vitro diagnosis of infection. It is useful for treating viral
CC diseases, eg. AIDS. See also AAQ06905-08 and AAQ06910-54. (updated on 09-
CC JAN-2003 to add missing OS field.)
XX
SQ Sequence 20 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 3 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 72.2%; Pred. No. 1.1e+03;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 1703 CTGTGCTACTGCTGCTGA 1720
Db 1 CTGTGCTATGCTGCTGCTGA 18
XX
RESULT 1720
AAQ13687
ID AAQ13687 standard; DNA; 20 BP.
XX
AC AAQ13687;
XX
DT 25-MAR-2003 (revised)
DT 26-NOV-1991 (first entry)
XX
DE N-ras gene codon 12 nucleotide variation detection step primer.
XX
KW ss.
XX
OS Synthetic.
XX
PN WO9113075-A.
XX
PD 05-SEP-1991.
XX
PF 16-FEB-1990; 90US-00482005.
XX
PR 16-FEB-1990; 90US-00482005.
XX
PA (ORIN ) ORION YHTMAE OY.
XX
PI Soderlund H, Syvanen AC;
XX
DR WPI; 1991-281407/38.
XX
PT Detection of specific nucleotide variations - by primer extension using a
PT detection step primer immediately adjacent the variable nucleotide.
XX
PS Claim 29; Page 61; 67pp; English.

```

XX The sequence is that of a detection step primer for use in the  
 CC identification of a mutation (G -> A) in the second nucleotide of codon  
 CC 12 of the N-ras gene. It corresponds to nucleotides 15 to 34 on the N-ras  
 CC gene and was synthesised on an Applied Biosystems 381A DNA synthesiser.  
 CC It allows the accurate determ. of changes in the N-ras gene with such  
 CC efficiency and ease that large numbers of samples can be screened. See  
 CC also AAQ1677-Q1689. (Updated on 25-MAR-2003 to correct PA field.)  
 XX

XX Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 229 AGTGTGTGTGTGTGCGCG 248  
 Db 1 ACTGTGTGTGTGTGAGCAG 20

RESULT 1721  
 AAQ22643/C  
 ID AAQ22643 standard; DNA; 20 BP.

XX AAQ22643;  
 XX 08-JUL-1992 (first entry)

XX Antisense oligonucleotide #15 targeted to ICAM-1 3'-UTR (1952-1971).  
 XX Intercellular adhesion molecule-1; inhibitor; phosphorothioate bond;  
 XX triple helix; 3' untranslated region; ss.  
 XX

XX Synthetic.  
 XX MO9203139-A.

XX 05-MAR-1992.

XX 23-JUL-1991; 91MO-US005209.

XX 14-NOV-1990; 90US-00567286.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Mirabelli CK, Mira;

XX WPI; 1992-096579/12.

XX New oligonucleotides hybridisable to cell adhesion modulators - for  
 PT treatment and diagnosis of e.g. allograft rejection, cancer, AIDS etc.  
 PT and diagnosis of intercellular adhesion dysfunction.  
 XX

XX Example 5; Page 43; 75pp; English.

XX This antisense oligonucleotide was designed to hybridise to the 3'-UTR of  
 CC human ICAM-1 mRNA. It was synthesised in the phosphorothioate form as  
 CC none of the phosphodiester form-antisense oligonucleotides which were  
 CC initially tested demonstrated inhibitory activity. Oligonucleotide #15  
 CC was found to be the most active of 16 potentially inhibitory anti-sense  
 CC sequences. Its anti-sense activity was not shared by other  
 CC oligonucleotides which hybridise to 3'-untranslated sequences. See e.g.  
 CC AAQ22644  
 CC

XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGCGCG 245  
 Db 20 GAGAGGGGAGAGTGTGCGG 1

RESULT 1722

AAQ6488/C  
 ID AAQ6488 standard; DNA; 20 BP.

XX AAQ6488;  
 XX 28-FEB-1995 (first entry)

XX K-ras codon 12 WTP-PCR set 1 primer #1.

XX Polymerase chain reaction; primer; PCR; amplify; oncogene; K-ras; mutant;  
 XX detection; sputum; ss.  
 XX

XX Synthetic.

XX JP06167492-A.

XX 14-JUN-1994.

XX 30-NOV-1992; 92JP-00345280.

XX 30-NOV-1992; 92JP-00345280.

XX (SAKA ) OTSUKA PHARM CO LTD.

XX WPI; 1994-230933/28.

XX Detection of variant oncogene by PCR amplification - using the mutation  
 PT site as the complementary base to the 3' end of a PCR primer.  
 PT

XX Disclosure; Fig 1; 6pp; Japanese.

XX The sequences given in AAQ6488-90 are primers which were used in the  
 CC method of the invention for the detection of a mutant oncogene. The  
 CC method allows the detection and measuring a mutant oncogene contained in  
 CC a sputum sample. PCR is performed by utilising the mutation position of  
 CC the objective mutant oncogene as the complementary base to the 3'  
 CC terminal at base of the PCR primer, and by using a mixture of three  
 CC primers which are different from the normal sequence at the 3'  
 CC terminus. Another primer is used to hold the mutant oncogene together so  
 CC that the mutant oncogene can be amplified position specifically and  
 CC detected. The oncogene is pref. the K-ras gene and the mutation to be  
 CC detected is pref. either codon 12, 13 or 61. This method allows detection  
 CC of a mutation which is present only in trace amounts in the test sample  
 XX

XX Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1311 GACATCACTACTACCCGAGT 1330  
 Db 20 GAGCTCCACTACCAAGT 1

RESULT 1723

AAQ44522/C  
 ID AAQ44522 standard; DNA; 20 BP.

XX AAQ44522;

XX AAQ44522; (revised)

XX 25-MAR-2003 (first entry)

XX Antisense oligonucleotide which targets human ICAM-1 3'-UTR.

XX Human intercellular adhesion molecule; ICAM-1; cell adhesion; modulation;  
 XX inflammation; psoriasis; malignant melanoma; inflammatory bowel disease;  
 XX antisense oligonucleotide; therapy; ss.  
 XX

OS	Synthetic.
XX	
FH	Key
FT	misc_feature
FT	1..tag
FT	/size= a
XX	/note= "in phosphorothioate form"
PN	WO9405333-A1.
XX	
PD	17-MAR-1994.
XX	
PF	27-AUG-1993; 93WO-US008101.
XX	
PR	02-SEP-1992; 92US-00939855.
PR	21-JAN-1993; 93US-00007997.
XX	
PR	17-MAY-1993; 93US-00063167.
XX	
PA	(ISIS-) ISIS PHARM INC.
XX	
PI	Bennet CF, Mirabelli CK;
XX	
DR	WPL; 1994-100869/12.
XX	
PT	Oligo:nucleotide modulation of cell adhesion - used in the treatment of
PT	e.g. psoriasis, inflammatory bowel disease or malignant melanoma.
XX	
PS	Claim 15; Page 51; 101pp; English.
XX	
CC	Antisense oligonucleotides which target human ICAM-1 were synthesised in
CC	both the phosphodiester and phosphorothioate forms. The oligonucleotides
CC	are useful to treat diseases which are modulated by changes in
CC	intercellular adhesion molecules. This sequence corresponds to
CC	nucleotides 1952-1971 of the 3'- untranslated region of the human ICAM-1
XX	coding sequence. (Updated on 25-MAR-2003 to correct pn field.)
XX	
SQ	Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
	Query Match 0.8%; Score 13.6; DB 1; Length 20;
	Best Local Similarity 80.0%; Pred. No. 1.le+03;
	Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0
OY	226 GAGAGTGTGTGTCGGCGC 245
DB	20 GAGAGCGGGAAGTGTGTGGGCG 1
	RESULT 1724
	AAQ67992/C
ID	AAQ67992 standard; DNA; 20 BP.
XX	
AC	AAQ67992;
XX	
DT	25-MAR-2003 (revised)
DT	02-JAN-1995 (first entry)
DE	
DE	Sequence of PCR primer for modified HBV core antigen core delta 8.
XX	
KM	Core antigen; recombinant replicable vaccinia virus; hepatitis;
KM	prevention; therapy; epitope; hepatitis B virus; PCR primer; ss.
XX	
OS	Synthetic.
XX	
PN	WO9412617-A1.
XX	
PD	09-JUN-1994.
XX	
PF	24-NOV-1993; 93WO-US011474.
XX	
PR	25-NOV-1992; 92US-00982211.
XX	
PA	(ITBI-) INT BIOTECHNOLOGY LAB INC.
XX	
I	Souw PTS, Okeefe RW, Lewis T, Bernstine EG;

```

XX  WPI; 1994-200247/24.
XX
XX  Prevention and treatment of hepatitis - using recombinant replicable
XX  PT vaccinia viruses contg. hepatitis B virus surface and core antigen
XX  PR nucleotide sequences.
XX
XX  Example; Page 84; 252pp; English.
XX
XX  HBV core antigen (Ag) encoding sequences were subcloned and engineered so
XX  CC as to be transcriptionally controlled by a vaccinia or vaccinia-like
XX  CC promoter. A deleted version of the core gene, referred to as core delta
XX  CC 8, in which 8 AAs are deleted, was used. A construct was made consisting
XX  CC of HBV MS antigen expressed from the modified p7.5 promoter and core
XX  CC delta 8 expressed from the p7.5 promoter. One primer used was AA067992
XX  CC which hybridises from bases -130 to -211 relative to the ATG of core
XX  CC delta 8, upstream of the p7.5 promoter, and creates a HindIII site. A
XX  CC second primer (AA067993) hybridises to the opposite strand from bases
XX  CC +563 to +546 and generates a HindIII site. (Updated on 25-MAR-2003 to
XX  CC correct FN field.)
XX
XX  Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
XX
XX  Query Match      0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX  512  ACCTGAGAGAGCTGACCTC 531
XX      ||| ||||| |||||
XX  Db    20  ACATCGAGAGAGCTTACCCAC 1
XX
XX  RESULT 1725
XX  ID      AA071023/c
XX  ID      AA071023 standard; cDNA; 20 BP.
XX
XX  AC      AA071023;
XX
XX  XX      25-MAR-2003 (revised)
XX  DT      19-APR-1995 (first entry)
XX
XX  DE      PCR primer for the mu-subtype opioind receptor.
XX
XX  KM      Rattus; Mu-subtype opioind receptor; MSOR; primer; ss.
XX
XX  OS      Synthetic.
XX
XX  PN      EP612845-A2.
XX
XX  PD      31-AUG-1994.
XX
XX  PF      09-FEB-1994; 94BP-00101968.
XX
XX  PR      26-FEB-1993; 93US-00026140.
XX
XX  PA      (AMCY ) AMERICAN CYANAMID CO.
XX
XX  PA      Eppler CM, Shieh H, Zysk JR, Corbett MJ;
XX
XX  WPI; 1994-265963/33.
XX
XX  Pure mu-type opioind receptor protein - and nucleic acid coding for it.
XX
XX  Example 1; Page 9; 39pp; English.
XX
XX  AA071022 and AA071023 are primers for the DNA sequence (AA079199) that
XX  CC codes for the rat mu-subtype opioind receptor (AA065188). (Updated on 25-
XX  CC MAR-2003 to correct FN field.)
XX
XX  Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX  Query Match      0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. NO. 1.1e+03;

```

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 849 CCTGACACAGACCTGAAC 868  
 |||||  
 DB 20 CCTGACACAGAACTTCAAGC 1

RESULT 1726  
 AAQ71501/C  
 ID AAQ71501 standard; cDNA; 20 BP.  
 XX  
 AC AAQ71501;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 02-MAY-1995 (first entry)  
 XX  
 DE Probe for identifying Brucella species.  
 XX  
 KW omp2; consensus; Brucella; identification; diagnosis; infection; biovar;  
 KW cattle; disease; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN US5348857-A.  
 XX  
 PD 20-SEP-1994.  
 XX  
 PF 06-NOV-1992; 92US-00972791.  
 XX  
 PR 22-MAY-1990; 90US-00527017.  
 XX  
 PA (TEXA ) UNIV TEXAS A & M.  
 XX  
 PI Ficht TA, Adams LG;  
 XX  
 DR WPI; 1994-302203/37.  
 XX  
 PT Identification of Brucella species or biovars - by amplification of the  
 PT Brucella omp2 gene locus and hybridisation with DNA probes.  
 XX  
 PS Disclosure; Col 41; 50pp; English.  
 XX  
 CC Rapid detection of Brucella may be achieved by amplifying the omp2 gene  
 CC locus of Brucella (which shows genetic variation correlating with  
 CC established species designations) and hybridising the amplified sequence  
 CC with a panel of DNA probes to identify a species of biovar of Brucella.  
 CC The amplified sequence is preferably a sequence between nucleotides 2470  
 CC and 3346 of the consensus sequence described in AAQ71479. The method is  
 CC used for the detection of Brucella infection in animals, particularly  
 CC humans and cattle. This probe specifically hybridises to sequences from  
 CC Brucella abortus biovar 1, Brucella abortus biovar 5, Brucella  
 CC melitensis, Brucella neotomae and Brucella ovis which are amplified by  
 CC the primers described in AAQ71496 and AAQ71497. The use of an array of  
 CC probes (See AAQ71498-509) allows specific identification of the species  
 CC of Brucella. (Updated on 25-MAR-2003 to correct PF field.)  
 XX  
 SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 177 CCGAGCATAGACAGACCA 196  
 |||||  
 DB 20 CCGAGCATAGGCAACACA 1

RESULT 1727  
 AAQ91248  
 ID AAQ91248 standard; DNA; 20 BP.  
 XX  
 AC AAQ91248;  
 XX

DT 10-JUL-1996 (first entry)  
 XX  
 DE EAA5 receptor PCR primer 7-6.  
 XX  
 KW Glutamate receptor; EAA5 receptor; excitatory amino acid; CNS receptor;  
 KW RNA editing; polymerase chain reaction; PCR; primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN W09517508-A2.  
 XX  
 PD 29-JUN-1995.  
 XX  
 PF 21-DEC-1994; 94WO-CA000705.  
 XX  
 PR 23-DEC-1993; 93US-00172188.  
 XX  
 PA (ALIX ) ALIEXIX BIOPHARMACEUTICALS INC.  
 XX  
 PI Kamboj R, Nutt S;  
 XX  
 DR WPI; 1995-240670/31.  
 XX  
 PT Identification of human CNS receptor ligand - and identification of  
 PT agents that modulate editing of human CNS receptors.  
 XX  
 PS Example 9; Page 35; 59pp; English.  
 XX  
 CC PCR primers (AAQ91246-50) were used to amplify human glutamate receptor  
 CC EAA5 genomic DNA and cDNA. Examination of the PCR products showed that  
 CC the cDNA sequence differed from the genomic sequence at 2 places in the  
 CC transmembrane domain-coding region, resulting in S310A and R352Q  
 CC substitutions. These variations were attributed to RNA editing involving  
 CC T to G and G and A substitutions. Similar RNA editing was found for EAA3  
 CC (see also AAQ91231) and EAA4 (see also AAQ91232) genes  
 XX  
 SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1211 CCGGCTCCACGGTGGAGAA 1230  
 |||||  
 DB 1 CTGGCTCCGAGGTGGTGA 20

RESULT 1728  
 AAT01753/C  
 ID AAT01753 standard; DNA; 20 BP.  
 XX  
 AC AAT01753;  
 XX  
 DT 18-DEC-1995 (first entry)  
 XX  
 DE Peptide Nucleic acid oligomer targeting ICAM-1 3'-UTR.  
 XX  
 KW peptide nucleic acid; PNA; intercellular adhesion molecule; ICAM-1;  
 KW endothelial leukocyte; ELAM-1; vascular; VCAM-1; antiinflammatory;  
 KW anticancer; antimeastatic; anti-AIDS; anti-rhinoviral; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..20  
 FT /\*tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of amide units, so that the  
 FT oligomer consists of the nucleobases attached covalently  
 FT to a polyamide backbone"  
 XX  
 XX W09504749-A1.

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PD 16-FEB-1995.
XX
XX 05-AUG-1994; 94WO-US009026.
XX
XX 05-AUG-1993; 93US-00102650.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Mirabelli CK;
XX
XX WPI; 1995-090842/12.
XX
XX New peptide nucleic acid oligomers hybridising to adhesion molecule genes
XX - are stable anti-sense cpds. of high affinity, partic. for treating
XX inflammation, viral infection, cancer etc.
XX
XX Claim 2; Page 35; 57pp; English.
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
XX acid (PNA) subunit and (B) have a sequence hybridisable to AUG region,
XX coding region, 5'-untranslated region or 3'-untranslated region of ICAM-1
XX or ELAM-1, or hybridisable to AUG region, coding region, 5'- untranslated
XX region, exon/intron junction region or 3'-untranslated region of VCAM-1.
XX The PNAs can be used to target RNA and single stranded DNA (ssDNA) to
XX produce antisense-type gene regulation moieties. Hence they may be used
XX therapeutically for modulating cellular adhesion and thus as
XX anti-neoplastic agents, anticancer agents, antiviral agents, anti-
XX AIDS agents and anti-inflammatory agents. They may also be useful as
XX diagnostics, e.g. as probes for specific mRNAs. PNA oligomers have high
XX affinity for complementary single stranded DNA. They are also able to
XX form triple helices in which a first PNA strand binds with RNA or ssDNA
XX and a second PNA strand binds with the resulting double helix or with the
XX first PNA strand. The PNAs possess no significant charge and are water
XX soluble, which facilitates cellular uptake. Further, since they contain
XX amides of non-biological amino acids, they are biostable and resistant to
XX enzymatic degradation by proteases. The present sequence targets human
XX intercellular adhesion molecule-1 (ICAM-1) 3' untranslated region
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 226 GAGAGTGTGCTGTGCGG 245
XX ||||| ||||| |||||
XX 20 GAGAGGCGAAGTGTGCGGG 1
XX
XX RESULT 1729
XX AAQ9937/c
XX ID AAQ9937 standard; cDNA; 20 BP.
XX
XX AC AAQ9937;
XX
XX DT 07-MAY-1996 (first entry)
XX
XX DE P16-specific mouse MTS1E1-beta cDNA reverse primer.
XX
XX KW Multiple tumour suppressor; R1-alpha; diagnosis; cancer; leukaemia;
XX astrocytoma; glioblastoma; Hodgkin's lymphoma; melanoma; glioma;
XX gene therapy; chronic; ss.
XX
XX OS Mus SP.
XX
XX PN WO9525429-A1.
XX
XX PD 28-SEP-1995.
XX
XX PF 17-MAR-1995; 95WO-US003316.
XX
XX XX 18-MAR-1994; 94US-00214581.
XX
XX PR 18-MAR-1994; 94US-00214582.
XX

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PR 18-MAR-1994; 94US-00215088.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Kamb A;
XX
XX WPI; 1995-344401/44.
XX
XX Wild-type multiple tumour suppressor (MTS) gene and mutant sequences -
XX useful in diagnosis, prognosis and therapy of human cancer, e.g. melanoma
XX or Leukaemia.
XX
XX Example 12; Page 71; 156pp; English.
XX
XX The cDNA sequences encoding several multiple tumour suppressor (MTS)
XX polypeptides have been isolated and sequenced, using various sequencing
XX and amplification primers. AAQ9936-40 are oligonucleotides used to
XX amplify cDNA encoding mouse MTS1E1-beta to allow comparison of the human
XX and murine sequences. MTS polypeptide-encoding cDNAs and mutants of these
XX are useful for the diagnosis or prognosis of human cancer. Germ-line
XX mutations of MTS cDNAs can be used for diagnosing predisposition to
XX melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioma,
XX Hodgkin's lymphoma, CLL and cancers of the pancreas, thyroid, ovary,
XX uterus, testis, kidney, stomach and rectum. The wild-type gene is useful
XX for gene therapy and MTS polypeptides may also be used for protein
XX replacement therapy. Also the polypeptides or cells contg. an altered MTS
XX gene are useful for screening for potential cancer therapeutics
XX
XX SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 505 GAGGCTACTGTGAGAACT 524
XX ||||| ||||| |||||
XX 20 GAGGCTTCTGTGACACGCT 1
XX
XX RESULT 1730
XX AAQ81115/c
XX ID AAQ81115 standard; DNA; 20 BP.
XX
XX AC AAQ81115;
XX
XX DT 25-MAR-2003 (revised)
XX
XX DT 28-SEP-1995 (first entry)
XX
XX DE Peptide nucleic acid.
XX
XX KW Peptide nucleic acid; gene therapy; transcription arrest; diagnosis;
XX prophylaxis; ss.
XX
XX OS Synthetic.
XX
XX FH Key
XX FT modified_base 20 Location/Qualifiers
XX FT /*tag= a
XX FT /note= "covalently bound Lys-NH2 group"
XX
XX PN WO9501370-A1.
XX
XX PD 12-JAN-1995.
XX
XX PF 28-JUN-1994; 94WO-US007319.
XX
XX XX 02-JUL-1993; 93US-00088658.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Buchardt O, Egholm M, Nielsen PE, Berg RH, Ecker DJ;

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PI Mollegaard NE;
XX
XX WPI; 1995-060949/08.
XX
XX Use of oligonucleotide analogues, partic. peptide nucleic acids - for
XX binding to ssDNA, dsDNA or RNA for use in therapy, diagnosis and
XX prophylaxis.
XX
XX Example 1; Page 28; 139pp; English.
XX
XX AAQ81115 is a peptide nucleic acid (PNA), which binds a target sequence.
XX The binding of the PNA prevents the transcription of the target sequence
XX by RNA polymerase. The ability of the PNA to arrest transcription makes
XX it useful in gene therapy, and in diagnostic and prophylactic methods.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX
XX SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGCGCG 245
DB 20 GAGAGGGGGAAGTGTGCGGG 1

RESULT 1731
AAQ81119/c
ID AAQ81119 standard; DNA; 20 BP.
XX
XX AAQ81119;
XX
XX 25-MAR-2003 (revised)
XX 28-SEP-1995 (first entry)
XX
XX Peptide nucleic acid.
XX
XX Peptide nucleic acid; gene therapy; transcription arrest; diagnosis;
XX prophylaxis; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 20
XX FT /*tag= a
XX FT /note= "amidatedq"
XX
XX PN WO9501370-A1.
XX
XX 12-JAN-1995.
XX
XX 28-JUN-1994; 94WO-US007319.
XX
XX 02-JUL-1993; 93US-00088658.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Buchardt O, Egholm M, Nielsen PE, Berg RH, Ecker DJ;
XX PI Mollegaard NE;
XX DR WPI; 1995-060949/08.
XX
XX Use of oligonucleotide analogues, partic. peptide nucleic acids - for
XX binding to ssDNA, dsDNA or RNA for use in therapy, diagnosis and
XX prophylaxis.
XX
XX Example 1; Page 28; 139pp; English.
XX
XX AAQ81119 is a peptide nucleic acid (PNA), which binds a target sequence.
XX The binding of the PNA prevents the transcription of the target sequence
XX by RNA polymerase. The ability of the PNA to arrest transcription makes
XX it useful in gene therapy, and in diagnostic and prophylactic methods.

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CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGCGCG 245
DB 20 GAGAGGGGGAAGTGTGCGGG 1

RESULT 1732
AAQ80945/c
ID AAQ80945 standard; DNA; 20 BP.
XX
XX AAQ80945;
XX
XX 25-MAR-2003 (revised)
XX 24-AUG-1995 (first entry)
XX
XX PCR primer to generate a random probe for screening complex genome.
XX
XX sequence sampled mapping; genomic analysis; complex genome mapping;
XX cosmid library; Giardia lamblia; ss.
XX
XX Synthetic.
XX
XX WO9429486-A1.
XX
XX 22-DEC-1994.
XX
XX 15-JUN-1994; 94WO-US006810.
XX
XX 15-JUN-1993; 93US-00078471.
XX 07-SEP-1993; 93US-00117952.
XX
XX (SALK ) SALK INST BIOLOGICAL STUDIES.
XX
XX Evans GA, Smith MW;
XX
XX WPI; 1995-036508/05.
XX
XX Sequencing complex genomes, present as fragments in a cosmid library - by
XX sequencing end-specific nucleotides of each clone then correlating with
XX spatial relationship of cosmid, esp. for mammalian chromosomes.
XX
XX Example 3; Page 43; 128pp; English.
XX
XX A probe of approximately 1 kb recognising beta-giardin genomic DNA was
XX generated by PCR with the oligonucleotides AAQ80942 and AAQ80943. A
XX random probe was generated as a 1.5 kb product with the primers AAQ80944
XX and AAQ80945. The probes were used in the identification of cosmids from
XX the beta-giardin genomic region in a Giardia lamblia 20-genome equivalent
XX cosmid library. This was part of a novel method for sequence-sampled
XX mapping of complex genomes. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX SQ Sequence 20 BP; 5 A; 11 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 230 GTGGTGTGTGTGCGCGCAGT 249
DB 20 GAGGTGTGTGTCTACGAGT 1

RESULT 1733
AAQ00729/c
ID AAQ00729 standard; DNA; 20 BP.
XX

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AC AAT00729;  
 XX  
 DT 08-MAY-1996 (first entry)  
 XX  
 DE Multiple tumour suppressor 1 gene p16 specific reverse PCR primer.  
 XX  
 KW Multiple tumour suppressor; MTS1; cancer; diagnosis; assay;  
 KW predilection; melanoma; leukaemia; lymphoma; prognosis; pancreas;  
 KW breast; thyroid; p16 specific; reverse PCR primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9525813-A1.  
 XX  
 PD 28-SEP-1995.  
 XX  
 PF 17-MAR-1995; 95WO-US003537.  
 XX  
 PR 18-MAR-1994; 94US-00214582.  
 PR 18-MAR-1994; 94US-00215086.  
 PR 14-APR-1994; 94US-00227369.  
 PR 01-JUN-1994; 94US-00251938.  
 XX  
 PA (UTAH ) UNITV UTAH RES FOUND.  
 PA (MYRI-) MYRIAD GENETICS INC.  
 XX  
 PI Skolnick MH, Cannon-Albright LA, Kamb A;  
 XX  
 DR WPI; 1995-344626/44.  
 XX  
 PT Detecting polymorphism associated with cancer pre-disposition - also DNA,  
 PT vectors and host cells e.g. for gene or protein replacement therapy and  
 PT drug screening.  
 XX  
 PS Example 12; Page 71; 148pp; English.  
 XX  
 CC An individual can be diagnosed as having a predisposition to cancer by  
 CC detecting an alteration in the wild type multiple tumour suppressor (MTS)  
 CC gene, using gene probes which hybridise to the MTS1 gene (amplified using  
 CC the PCR primers AAT00729-31). The above assay can also be used in the  
 CC diagnosis and prognosis of melanoma, lymphoma, leukaemia and pancreas,  
 CC breast and thyroid cancers, etc  
 XX  
 SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 XX  
 Db 505 GAGGGCTACCTGGAGAACT 524  
 20 GAAGGCTTCTCGACACGCT 1  
 XX  
 RESULT 1734  
 AAQ88741/c  
 ID AAQ88741 standard; DNA; 20 BP.  
 XX  
 AC AAQ88741;  
 XX  
 DT 27-FEB-1996 (first entry)  
 XX  
 DE Human ICAM modified antisense oligonucleotide.  
 XX  
 KW antisense; analogue; non-terminal pyrimidine; phosphorothioate; backbone;  
 KW treatment; HIV; human immunodeficiency virus; HSV; herpes simplex virus;  
 KW cancer; integrin; cell adhesion receptor; infection; diagnosis;  
 KW nuclease resistance; ss.  
 XX  
 OS Homo sapiens.  
 OS  
 XX  
 PN BP653439-A2.

XX  
 PD 17-MAY-1995.  
 XX  
 PF 07-NOV-1994; 94BP-00117513.  
 XX  
 PR 12-NOV-1993; 93DE-0438704.  
 XX  
 PA (FARH ) HOECHST AG.  
 XX  
 PI Feyman A, Uhlmann E, Mag M, Kretschmar G, Helsberg M, Winkler I;  
 XX  
 DR WPI; 1995-180677/24.  
 XX  
 PT New anti-sense oligo:nucleotide analogues - with modified non-terminal  
 PT pyrimidine nucleotide units, useful for treating viral infections,  
 PT cancer, etc.  
 XX  
 PS Claim 1; Page 31; 36pp; German.  
 XX  
 CC The antisense oligonucleotide (ON) shown is a derivative of an equivalent  
 CC wild type Human ICAM ON, in which at least one, esp. 2-10, non-terminal  
 CC pyrimidine nucleotide(s) is/are modified. The modification may be: (a)  
 CC replacement of a phosphodiester linkage by: a phospho-thioate (PS), -  
 CC thioate, -aramidate; borano-, alkyl-, aralkyl-phosphate; 2,2,2-  
 CC trichloro-1,1-dimethyl-, alkyl- or aryl- phosphonate linkage; or (3')-  
 CC thio)formacetal, methylhydroxylamine, oxime, methylenedimethylhydrazo,  
 CC dimethylene sulphone or silyl linkage; (b) replacement of a sugar  
 CC phosphate backbone by a 'morpholinonucleoside' oligomer; (c) replacement  
 CC of beta-D-2-deoxyribose by another sugar or carbocyclic, open-chain or  
 CC bicyclic sugar analogue; or (c) replacement of the natural nucleoside  
 CC base by an analogue, e.g. 5-hydroxymethyl-uridine. The 5' and/or 3'  
 CC termini may also be modified with a lipophilic gp., eg. a fattyacyl. The  
 CC modifications increase nuclease resistance and thus improve stability and  
 CC activity  
 XX  
 SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 XX  
 Db 226 GAGAGTGCTGTGGTGGCGG 245  
 20 GAGAGCGGAGAGTGCTGGCGG 1  
 XX  
 RESULT 1735  
 AAT41336/c  
 ID AAT41336 standard; DNA; 20 BP.  
 XX  
 AC AAT41336;  
 XX  
 DT 04-DEC-1996 (first entry)  
 XX  
 DE Human gene signature HUMGS00995-derived anti-sense primer.  
 XX  
 KW Gene signature; messenger RNA; mRNA; relative abundance; frequency;  
 KW human; Cloning; mapping; non-biased library; diagnosis; detection;  
 KW cell typing; abnormal cell function; primer; PCR; amplification;  
 KW polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 OS  
 XX  
 PN WO9514772-A1.  
 XX  
 PD 01-JUN-1995.  
 XX  
 PF 11-NOV-1994; 94WO-JP001916.  
 XX  
 PR 12-NOV-1993; 93JP-00355504.  
 XX  
 PA (MATS/) MATSUBARA K.  
 PA (OKUB/) OKUBO K.

```
XX Matsubara K, Okubo K;
XX WPI; 1995-206931/27.
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX Example 7; Fig 10; 2245bp; Japanese.
XX Primers T11001-T11382 are derived from novel human gene signature (GS)
XX sequences which did not match with sequences deposited in Genbank release
XX 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
XX libraries prepared from various human tissues; synthesis of cDNA was
XX initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
XX Each library is constructed so as to reflect accurately the relative
XX abundance of different mRNAs in the particular tissue from which it was
XX derived. The appearance frequency of a given GS in a cDNA library can be
XX determined (esp. using primers and probes derived from the GS sequences)
XX as a means of diagnosing abnormal cell function or for recognising
XX different cell types. The primers T4135-6 amplify clone pm0268 which
XX comprises the GS HUMGS000995 (T19995). This amplification reaction gave a
XX prod. indistinguishable from the same PCR using mouse or Chinese hamster
XX ovary DNA as a template
XX Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 339 GGACTTGAAGATGGGCTGTG 358
DB 20 GGTATATAAGATGGGCTGTG 1
RESULT 1736
AAQ99517/c
ID AAQ99517 standard; DNA; 20 BP.
XX AAQ99517;
XX 28-FEB-1996 (first entry)
XX Human Fas ligand phosphorothioate antisense oligonucleotide A69.
XX Fas ligand; Tumour Necrosis factor family; apoptosis; cell death;
XX Fas cell surface antigen; human; Fas-L; phosphorothioate;
XX antisense oligonucleotide; inhibition; ss.
XX Synthetic.
XX WO9513293-A1.
XX 18-MAY-1995.
XX 10-NOV-1994; 94WO-JP001899.
XX 10-NOV-1993; 93JP-00305975.
XX 13-DEC-1993; 93JP-00342526.
XX 18-MAR-1994; 94JP-00074344.
XX 08-JUL-1994; 94JP-00180955.
XX 07-SEP-1994; 94JP-00239363.
XX 18-OCT-1994; 94JP-00278378.
XX (MOCH) MOCHIDA PHARM CO LTD.
XX (OSAB-) OSAKA BIOSCIENCE INST.
XX Nagata S, Suda T, Takahashi T, Nakamura N;
XX WPI; 1995-194031/25.
XX
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```
PT Peptide which binds to Fas antigen, and antibody reactive with it - for
PT treatment and diagnosis of viral or auto-immune diseases.
XX Example 20; Page 111; 300pp; Japanese.
XX A sense oligonucleotide S50 (AAQ99516) corresp. to nucleotides 50-69 in
XX the human Fas ligand coding sequence given in AAT03498 was synthesised
XX with phosphorothioate linkages. The complementary, antisense
XX oligonucleotide A69 (AAQ99517) was also synthesised. The effects on Fas
XX ligand-mediated apoptosis of A69 and S50 were analysed
XX Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 483 ACCAGCTGACATCCGGCTGC 502
DB 20 ACCAGCTGCCATGCAGCAGC 1
RESULT 1737
AAQ99516
ID AAQ99516 standard; DNA; 20 BP.
XX AAQ99516;
XX 28-FEB-1996 (first entry)
XX Human Fas ligand phosphorothioate sense oligonucleotide S50.
XX Fas ligand; Tumour Necrosis factor family; apoptosis; cell death;
XX Fas cell surface antigen; human; Fas-L; phosphorothioate;
XX sense oligonucleotide; inhibition; ss.
XX Synthetic.
XX WO9513293-A1.
XX 18-MAY-1995.
XX 10-NOV-1994; 94WO-JP001899.
XX 10-NOV-1993; 93JP-00305975.
XX 13-DEC-1993; 93JP-00342526.
XX 18-MAR-1994; 94JP-00074344.
XX 08-JUL-1994; 94JP-00180955.
XX 07-SEP-1994; 94JP-00239363.
XX 18-OCT-1994; 94JP-00278378.
XX (MOCH) MOCHIDA PHARM CO LTD.
XX (OSAB-) OSAKA BIOSCIENCE INST.
XX Nagata S, Suda T, Takahashi T, Nakamura N;
XX WPI; 1995-194031/25.
XX Peptide which binds to Fas antigen, and antibody reactive with it - for
XX treatment and diagnosis of viral or auto-immune diseases.
XX Example 20; Page 111; 300pp; Japanese.
XX A sense oligonucleotide S50 (AAQ99516) corresp. to nucleotides 50-69 in
XX the human Fas ligand coding sequence given in AAT03498 was synthesised
XX with phosphorothioate linkages. The complementary, antisense
XX oligonucleotide A69 (AAQ99517) was also synthesised. The effects on Fas
XX ligand-mediated apoptosis of A69 and S50 were analysed
XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
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Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 483 ACCAGCTGACATCGGCTG 502  
 |||||  
 Db 1 ACCAGCTGCCATGACAGC 20

RESULT 1738  
 AAT44449/c  
 ID AAT44449 standard; DNA; 20 BP.  
 XX  
 AC AAT44449;  
 XX  
 DT 27-JAN-1997 (first entry)  
 XX

DE Antisense oligonucleotide against ICAM gene.  
 XX  
 KW 8-azapurine; modification; stronger complex; inhibition;  
 KW intracellular adhesion molecule; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN EP680969-A2.  
 XX  
 PD 08-NOV-1995.  
 XX  
 PF 26-APR-1995; 95EP-00106230.  
 XX  
 PR 02-MAY-1994; 94DE-04415370.  
 XX  
 PA (FARH ) HOECHST AG.  
 XX  
 PI Seela F, Lampe S;  
 XX  
 DR WPI; 1995-375165/49.  
 XX

PT New oligo:nucleotide(s) contg. 8-aza:purine base - useful as therapeutic  
 PT and diagnostic agents with more stable hybridisation to target nucleic  
 PT acid.  
 XX  
 PS Disclosure; Page 44; 51pp; German.  
 XX

CC AAT44425-54 are antisense oligonucleotides which have at least one 8-  
 CC azapurine base. The presence of an 8-azapurine base results in  
 CC significantly stronger complexing when hybridising to target nucleic  
 CC acids. The present sequence is against the intracellular adhesion  
 CC molecule (ICAM) gene  
 XX

SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGGCGG 245  
 |||||  
 Db 20 GAGAGGGGAAGTGTGTGGCGG 1

RESULT 1739  
 AAT44250/c  
 ID AAT44250 standard; DNA; 20 BP.  
 XX  
 AC AAT44250;  
 XX

DT 22-JUL-1997 (first entry)  
 XX

DE ICAM antisense component of capped oligonucleotide.  
 XX

KW Antisense therapy; guanosine; intercellular adhesion molecule; ICAM;  
 KW nuclease resistance; stability; ss.  
 XX  
 OS Synthetic.

XX DE19502912-A1.  
 PN  
 XX  
 PD 01-AUG-1996.  
 XX

PF 31-JAN-1995; 95DE-01002912.  
 XX

PR 31-JAN-1995; 95DE-01002912.  
 XX

PA (FARH ) HOECHST AG.  
 XX

PI Peyman A, Uhlmann E;  
 XX

DR WPI; 1996-355223/36.  
 XX

PT Oligo:nucleotide(s) with series of G residues at at least one end have  
 PT increased stability against nuclease and cell penetration, - are partic.  
 PT anti:sense sequences for treating and diagnosing cancer, viral diseases  
 PT etc.  
 XX

PS Claim 3; Page 13; 15pp; German.  
 XX

CC Ten- to 40-mer oligonucleotides which have a cap of 1-10 (esp. 4) G  
 CC residues on at least one end are provided; if caps are present at both  
 CC ends, they can be of the same or different lengths. A cap sequence  
 CC increases nuclease resistance of the oligonucleotide and also increases  
 CC cell penetration. The present sequence is that of a preferred  
 CC oligonucleotide, directed against an intercellular adhesion molecule  
 CC sequence, which can be capped for use in anticancer therapy  
 XX

SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGGCGG 245  
 |||||  
 Db 20 GAGAGGGGAAGTGTGTGGCGG 1

RESULT 1740  
 AAX33922/c  
 ID AAX33922 standard; DNA; 20 BP.  
 XX  
 AC AAX33922;  
 XX

DT 30-JUN-1999 (first entry)  
 XX

DE ICAM expression inhibitor.  
 XX

KW Gene expression inhibitor; probe; nucleic acid detection; growth factor;  
 KW viral infection; therapy; HSV-1; cancer; restenosis; integrin;  
 KW cell-cell adhesion receptor; ICAM; ss.  
 XX

OS Synthetic.  
 OS Homo sapiens.  
 XX

PN AU9648028-A.  
 XX

PD 26-SEP-1996.  
 XX

PF 12-MAR-1996; 96AU-00048028.  
 XX

PR 13-MAR-1995; 95DE-01008923.  
 XX

PA (FARH ) HOECHST AG.  
 XX

PI Peyman A, Uhlmann E, Breipohl G, Wallmeier H;  
 XX

DR WPI; 1996-455932/46.  
 XX





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PN EP764721-A1.
XX
XX 26-MAR-1997.
XX
XX 17-SEP-1996; 96EP-00114885.
XX
XX 18-SEP-1995; 95JP-00264943.
XX
XX (UYCH-) UNIV CHIBA SUSUMU SEINO INOHANA SHUKUSHA.
XX (JCRP-) JCR PHARM CO LTD.
XX
XX Seino S, Inagaki N;
XX WPI; 1997-181836/17.
XX
XX Human and mouse pancreatic ATP sensitive potassium channel proteins - for
XX diagnosis, therapy and research into potassium channel related diseases,
XX e.g. diabetes.
XX
XX Example 3; Fig 6; 16pp; English.
XX
XX PCR primers (AAT61868-79) were designed to amplify subregions A-F of the
XX human pancreatic ATP sensitive potassium channel beta-IR gene (see also
XX AAT61866). The antisense primer (AAT61877) for subregion B (249 bp)
XX corresponds to nucleotides 999-1019 of the gene. Cys-1abelled primers
XX were used in the PCR-SSCP analysis of genomic DNA collected from 20
XX healthy Japanese subjects
XX
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 885 TGGCAACATCATCAACATGC 904
DB 20 TGGCAACACCATCAAGTGC 1
RESULT 1746
AAT48972/C
ID AAT48972 standard; DNA; 20 BP.
XX
XX AAT48972;
XX
XX 18-SEP-1997 (first entry)
XX
XX Complementary human MRP oligonucleotide 3(3B)MRP.
XX
XX Human multidrug resistance-1; MDR-1; inhibition; apremaric;
XX human multidrug resistance-associated protein; antisense; cytotoxic;
XX chemotherapeutic; cancer; ss.
XX
XX Synthetic.
XX
XX Key location/Qualifiers
XX msc_feature 1..20
XX /*tag= a
XX /note= "Backbone selected from: phosphorothioate;
XX dithioate; methylphosphonate; phosphodiester; morpholino
XX backbone; polyamide backbone; and any combination of
XX these backbone types; the backbone may be modified to
XX incorporate a ribozyme structure, or a pendant group"
XX
XX MO9640715-A1.
XX
XX 19-DEC-1996.
XX
XX 06-JUN-1996; 96MO-US009388.
XX
XX 07-JUN-1995; 95US-00487141.
XX
XX (UTNE-) UNIV NEBRASKA.
XX
XX
```

```
XX Smith LJ;
XX
XX WPI; 1997-052217/05.
XX
XX Oligo-nucleotide(s) able to inhibit multi:drug resistant phenotype -
XX either by anti:sense or aptameric effects; useful for enhancing cytotoxic
XX effects of chemotherapeutic agents on multi:drug resistant cancer cells.
XX
XX Disclosure; Page 17; 74pp; English.
XX
XX The present sequence represents a novel oligonucleotide 3(3B)MRP that
XX specifically hybridises in a human cell with a complementary sequence of
XX human multidrug resistance-associated protein (MRP) gene. Hybridisation
XX causes inhibition of expression of the multidrug resistance phenotype by
XX the cell, due to the oligonucleotide having an aptameric inhibitory
XX effect as well as an antisense inhibitory effect. The oligonucleotide is
XX administered to cancer patients to prevent development of the multidrug
XX resistant phenotype. When co-administered with chemotherapeutic agents,
XX the oligonucleotide is useful for potentiating elimination of multidrug
XX resistant tumour cells from bone marrow or peripheral stem cell grafts.
XX Also, the oligonucleotide can be used as an immunosuppressive agent
XX
XX Sequence 20 BP; 1 A; 5 C; 10 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 733 GCACCTGCACCGCCATCG 752
DB 20 GCAGCAGCCACCGCCATCG 1
RESULT 1747
AAT72304/C
ID AAT72304 standard; DNA; 20 BP.
XX
XX AAT72304;
XX
XX 25-MAR-2003 (revised)
XX 10-SEP-1997 (first entry)
XX
XX p16 promoter specific reverse primer.
XX
XX Primer; polymerase chain reaction; PCR; amplification; p16; promoter; ss.
XX
XX Synthetic.
XX
XX US5624819-A.
XX
XX 29-APR-1997.
XX
XX 07-JUN-1995; 95US-00474177.
XX
XX 18-MAR-1994; 94US-00214582.
XX 18-MAR-1994; 94US-00215086.
XX 18-MAR-1994; 94US-00215087.
XX 14-APR-1994; 94US-00227369.
XX 01-JUN-1994; 94US-00251938.
XX 17-MAR-1995; 95MO-US003537.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX (UTAH ) UNIV UTAH RES FOUND.
XX
XX Cannon-Albright LA, Kamb A, Skolnick MH;
XX
XX WPI; 1997-258217/23.
XX
XX Human mutant multiple tumour suppressor gene sequences - for production
XX of recombinant mutant polypeptide (s).
XX
XX Example 12; Col 83-84; 72pp; English.
XX
XX
```

XX The present sequence is primer for the PCR amplification of the P16  
CC promoter. (Updated on 25-MAR-2003 to correct PF field.)  
CC  
XX

SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 505 GAGGCTACCTGAGAGCT 524  
DB 20 GAGGCTTCCTGACACGCT 1

RESULT 1748  
AAT98014  
ID AAT98014 standard; DNA; 20 BP.

AC AAT98014;

DT 25-MAR-2003 (revised)  
DT 08-SEP-1998 (first entry)

DE Human or simian immunodeficiency virus detection primer MMY4B.

KW Primer; PCR; amplification; gag; vpr; pol; vpu; HIV-1; HIV-2; SIV; nef2;  
KW vif2; vpx; detection; ss.

XX Synthetic.

OS Human immunodeficiency virus.  
OS Simian immunodeficiency virus.

PN EP806484-A2.

PD 12-NOV-1997.

PF 05-JUN-1990; 97EP-00110543.

PR 02-JUN-1989; 89FR-00007354.

PR 20-SEP-1989; 89FR-00012371.

PR 05-JUN-1990; 90EP-00401520.

PA (INSP ) INST PASTEUR.

PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.

PI Moncany M, Montagnier L;

PI WPI; 1997-538622/50.

PT Oligo-nucleotide primers for amplifying retroviral nucleic acids -

PT comprising conserved sequences of human immunodeficiency virus and simian

PT immunodeficiency virus genes.

PS Claim 4; Page 18; 23pp; French.

XX The oligonucleotides AAT98010-T98059 are useful as primers for nucleic  
CC acid amplification of conserved sequences of the gag, vpr, pol or vpu  
CC genes of the HIV-1 strains Bru, Mal, Etl, HIV-2 ROD or simian  
CC immunodeficiency virus (SIV) MAC or the nef2, vif2 or vpx genes of HIV-2  
CC ROD and SIV MAC. This primer is targeted to sequences in the gag gene of  
CC the viral strains. The sequence are therefore used to detect HIV-1, HIV-2  
CC or SIV infections. (Updated on 25-MAR-2003 to correct PF field.) (Updated  
CC on 25-MAR-2003 to correct PR field.)

XX Sequence 20 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 3 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 72.2%; Pred. No. 1.1e+03;  
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1703 CTCGCTACCTGCTGA 1720  
||:|||||:||||:||||

DB 1 CTTGCAATGCTGCTGA 18

RESULT 1749

AAT47409/C

ID AAT47409 standard; DNA; 20 BP.

AC AAT47409;

DT 10-SEP-1997 (first entry)

DE Primer #35 for cystic fibrosis transmembrane regulator gene.

KW PCR; primer; amplify; polymerase chain reaction; bacteriophage; M13mp18;  
KW cystic fibrosis transmembrane conductance regulator gene; multiplex PCR;  
KW chimeric primer; genetic screening; mutation detection; CFTR;  
KW Wilms Tumour gene; beta-thalassaemia gene; ss.

XX Synthetic.

PN WO9641012-A1.

PD 19-DEC-1996.

PF 06-JUN-1996; 96WO-US0009637.

PR 07-JUN-1995; 95US-00474450.

PA (GENZ ) GENZYME CORP.

PI Shuber AP;

PI WPI; 1997-052372/05.

PT Universal primer used for multiplex DNA amplification - allows  
PT simultaneous amplification of multiple DNA target sequences for high  
PT throughput genetic screening.

PS Example 3; Fig 1b; 38pp; English.

CC AAT4775-T47409 represent amplification primers for the cystic fibrosis  
CC transmembrane regulator (CFTR) gene. These sequences can be used as half  
CC of the chimeric primer of the invention. The primers are used for  
CC amplification of a target DNA sequence, and can be used in a multiplex  
CC PCR amplification. The primers have the sequence 5'-XX-3', where X is a  
CC sequence that does not hybridise to the target sequence. (such as AAT47344  
CC -T47374), and Y is a sequence contained within or flanking the target  
CC sequence (such as this sequence). During early cycles of amplification,  
CC products are synthesised that contain the chimeric primers on either end.  
CC The primers then serve as high stringency recognition sequences for  
CC subsequent rounds of amplification. As a result, the annealing efficiency  
CC of different primers and their targets in a multiplex amplification  
CC reaction is normalised, thereby reducing preferential amplification of  
CC certain targets. The chimeric primer comprise a 5' universal domain and a  
CC 3' target-specific domain. They are used for the simultaneous PCR  
CC amplification of multiple DNA targets in a sample. The primer containing  
CC AAT47344 is particularly useful in high-throughput genetic screening for  
CC detecting the presence of multiple defined targets e.g. to detect  
CC mutations in genes like the CFTR, the Wilms Tumour, and the beta-  
CC thalassaemia genes

XX Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1223 TGGAGGAACAGTACCTTC 1242  
DB 20 TGGAGCAACAGTACTTTC 1  
||:|||||:||||:||||

RESULT 1750

```

AAT94038
ID AAT94038 standard; cDNA; 20 BP.
XX
XX
AC AAT94038;
XX
XX
DT 25-MAR-2003 (revised)
DT 01-APR-1998 (first entry)
XX
XX
DE Forward PCR primer used to amplify a 241 bp fragment of cMOAT cDNA.
XX
XX
KW Canalicular multispecific organic anion transporter protein;
KW cMOAT protein; ATP-binding cassette transporter family; ABC transporter;
KW hepatobiliary excretion; multidrug resistance-associated protein;
KW cMOAT protein activity; multidrug resistance-related protein; MDR-1;
KW Dubin-Johnson disease; Rotor disease; PCR primer; ss.
XX
XX
OS Synthetic.
OS Homo sapiens.
XX
XX
PN M09731111-A2.
XX
XX
PD 28-AUG-1997.
XX
XX
PE 21-FEB-1997; 97WO-NL0000079.
XX
XX
PR 22-FEB-1996; 96EP-00200460.
XX
XX
PA (INTR-) INTROGENE BV.
PA (MEDI-) ACAD MEDISCH CENT AMSTERDAM.
PA (HETN-) HET NEDERLANDS KANKER INST.
XX
XX
PI Oude Elferink RPI, Paulusma CC, Bosma PJ, Borst P, Evers R;
PI Kool M;
XX
XX
DR WPI; 1997-435163/40.
XX
XX
PT DNA encoding human and rat canalicular multispecific organic anion
PT transporter proteins - useful for diagnosis and treatment of Dubin-
PT Johnson disease and Rotor disease.
XX
XX
PS Example 6; Page 29; 106pp; English.
XX
XX
CC PCR primers AAT94038-39 were used to amplify a 241 bpo fragment of
CC canalicular multispecific organic anion transporter (cMOAT) protein cDNA.
CC The PCR product was cloned, and subsequently used in a RNase protection
CC assay. cMOAT is a new member of the ATP-binding cassette (ABC)
CC transporter family. The ATP dependent cMOAT transporter system mediates
CC hepatobiliary excretion in the liver. cMOAT may be a liver-specific
CC homologue of multidrug resistance-associated protein. The nucleic acids
CC are used to provide cells with cMOAT protein activity. cMOAT protein
CC activity in cells can be enhanced by increasing the level of glutathione,
CC glucuronide and/or sulphate. Antisense constructs, especially derived
CC from another multidrug resistance (MDR)-related protein, e.g. MDR-1, to
CC the nucleic acids and vectors can be used to decrease the level of cMOAT
CC in a cell. The nucleic acids and proteins can be used especially in
CC diagnosis of Dubin-Johnson disease, Rotor disease or another disease
CC involving cMOAT. The cMOAT gene may also be used as a selectable marker
CC gene. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX
SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1239 CTTGATCTTCGATATCTTAG 1258
DB 1 CTGCTCTTCAGAACTTAG 20

RESULT 1751
AAV53844/c
ID AAV53844 standard; DNA; 20 BP.

```

```

XX
XX
AC AAV53844;
XX
XX
DT 04-DEC-1998 (first entry)
XX
XX
DE Nucleotide sequence of p16 specific reverse PCR primer.
XX
XX
KW Multiple tumour suppressor; MTS; human; cancer; hybridisation;
KW somatic mutation; gene therapy; PCR; primer; amplification; ss.
XX
XX
OS Synthetic.
XX
XX
PN US5801236-A.
XX
XX
PD 01-SEP-1998.
XX
XX
PE 07-JUN-1995; 95US-00480810.
XX
XX
PR 18-MAR-1994; 94US-00214582.
PR 18-MAR-1994; 94US-00215086.
PR 18-MAR-1994; 94US-00215087.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
PR 17-MAR-1995; 95WO-US003316.
XX
XX
PA (MYRI-) MYRIAD GENETICS INC.
XX
XX
PI Kamb A;
XX
XX
DR WPI; 1998-494842/42.
XX
XX
PT Nucleic acids based on multiple tumour suppressor, MTS, sequences -
PT useful as hybridisation probes, primers and recombinant production of MTS
PT in the diagnosis and treatment of cancers related to MTS mutation(s).
XX
XX
PS Example 12; Col 85-86; 73pp; English.
XX
XX
CC This is the nucleotide sequence of a PCR primer used for amplification in
CC the method of the invention involving the use of the multiple tumour
CC suppressor (MTS) gene, to diagnose and treat cancer. The MTS gene is
CC useful in the diagnosis and prognosis of human cancer, e.g. by standard
CC nucleic hybridisation techniques, of patient samples. The mutated
CC sequences are those that are present in somatic mutations of the gene in
CC cancers. The vectors can be used for gene therapy strategies to replace
CC function of mutated protein in patients. These can also be used to
CC construct protein mimetics, also for therapeutic strategies. In addition
CC the expression constructs can also be used for recombinant production of
CC MTS. Recombinant MTS can be used to screen for drugs to be used for
CC cancer therapy, and the protein itself may also be used to restore MTS
CC function in a cell
XX
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 505 GAGGCTACCTGGAGAGCT 524
DB 20 GAAGCTTCTTGACACGCT 1

RESULT 1752
AAV47686/c
ID AAV47686 standard; DNA; 20 BP.
XX
XX
AC AAV47686;
XX
XX
DT 20-NOV-1998 (first entry)
XX
XX
DE Unmethylated CpG dinucleotide 2001.
XX
XX
XX Unmethylated CpG dinucleotide; immune response; bacterial meningitis;

```



KW natural killer cell activation; NK cell; Th2 response; neonatal sepsis;  
 KW pulmonary disorder; asthma; environmentally induced airway disease;  
 KW bacterial infection; endotoxaemia; therapy; cystic fibrosis;  
 KW inflammatory bowel disease; ss.  
 OS Synthetic.  
 XX  
 XX  
 PM WO9837919-A1.  
 XX  
 XX  
 PD 03-SEP-1998.  
 XX  
 XX  
 PF 25-FEB-1998; 98WO-US003678.  
 XX  
 PR 28-FEB-1997; 97US-0039405P.  
 XX  
 PA (IOWA ) UNIV IOWA RES FOUND.  
 XX  
 PI Schwartz DA, Krieg AM;  
 XX  
 DR WPI; 1998-480941/41.  
 XX  
 FT Use of nucleic acids containing an unmethylated CpG - for treating a  
 PT subject having or at risk of having an acute decrement in air flow or  
 PT inhibiting an inflammatory response.  
 PS  
 PS Claim 35; Page 27; 65pp; English.  
 CC This sequence represents an unmethylated CpG dinucleotide, and can be  
 CC used in the method of the invention. The method is for treating a subject  
 CC having, or at risk of having an acute decrement in air flow, comprising  
 CC administering a nucleic acid sequence containing at least one  
 CC unmethylated CpG. The nucleic acids containing an unmethylated CpG  
 CC dinucleotide affect an immune response in a subject by activating natural  
 CC killer cells (NK) or redirecting a subject's immune response from a Th2  
 CC to a Th1 response by inducing monocytic and other cells to produce Th1  
 CC cytokines. They can be used to treat pulmonary disorders having an  
 CC immunologic component, such as asthma or environmentally induced airway  
 CC disease. They can also be used to treat diseases associated with Gram-  
 CC positive bacterial infections or endotoxaemia including bacterial  
 CC meningitis, neonatal sepsis, cystic fibrosis, inflammatory bowel disease  
 CC and liver cirrhosis, Gram-negative pneumonia, Gram-negative abdominal  
 CC abscess, haemorrhagic shock, disseminated intravascular coagulation, or  
 CC an inflammatory response to lipopolysaccharide  
 XX  
 SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 555 CCTGAGCGCGCGCTCGGTC 574  
 Db 20 CCGCGCGCGCGCGCGCGCC 1  
 RESULT 1753  
 AAV60732/c  
 ID AAV60732 standard; DNA; 20 BP.  
 XX  
 AC AAV60732;  
 XX  
 XX 08-DEC-1998 (first entry)  
 DE Primer #2 for human CDK2 codons 1-149.  
 XX  
 XX PCR primer; amplification; yeast; UAS; upstream activating sequence;  
 KW transcription terminator; cell cycle; Upstream Activation Sequence; UAS;  
 KW promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector;  
 KW cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX

PM WO9816660-A1.  
 XX  
 XX 23-APR-1998.  
 PD  
 XX  
 XX  
 PF 16-OCT-1997; 97WO-US018608.  
 XX  
 XX  
 PR 16-OCT-1996; 96US-0029127P.  
 XX  
 PR 27-NOV-1996; 96US-0031968P.  
 XX  
 PA (BITT-) BITTECH INC.  
 XX  
 PI Bitter GA;  
 XX  
 DR WPI; 1998-251302/22.  
 XX  
 XX  
 PT Screening for agents that effect cell cycle regulatory proteins - using a  
 PT cell line that expresses a reporter gene in response to regulation  
 PT through phosphorylation by a cyclin/CDK system.  
 PS  
 PS Example 4; Page 70; 93pp; English.  
 CC Primers AAV60731-V60732 were used to PCR amplify codons 1-149 of the  
 CC human cyclin-dependent kinase 2 (hCDK2) gene. The amplified product was  
 CC used to generate a fusion protein comprising part of the hCDK2 sequence  
 CC linked to codons 154-302 of the yeast PHO85 gene. The fusion protein is  
 CC used to screen for compounds that affect mammalian cell cycle regulatory  
 CC proteins. The method comprises administering a compound to a cell line,  
 CC which contains a reporter gene linked to an Upstream Activation Sequence  
 CC (UAS) and a promoter, where the UAS binds a transcription control factor  
 CC (rCP) which is regulated through cyclin/cyclin-dependent kinase (CDK)  
 CC phosphorylation. Also included in the construct is an effector gene  
 CC providing a gene product to permit normal cyclin/CDK regulation of the  
 CC rCP. Expression of the reporter gene is then analysed in the cell line,  
 CC thereby determining whether the compound affects the normal regulation.  
 CC The method can be used to identify inhibitors and activators of mammalian  
 CC cell cycle regulatory proteins, especially inhibitors and activators of  
 CC cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and  
 CC cyclin/CDK/CKI complexes. The identified agents can be used for  
 CC stimulating growth of cells (as in wound healing), or regulating  
 CC excessive cell growth and division (as in cancer therapy)  
 XX  
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1031 CTGACTTGGCGCTGCGCGA 1050  
 Db 20 CAGACTTGGAGTAGCCAGA 1  
 RESULT 1754  
 AAV69958/c  
 ID AAV69958 standard; DNA; 20 BP.  
 XX  
 AC AAV69958;  
 XX  
 XX 04-FEB-1999 (first entry)  
 DE Human c-fos protein antisense oligonucleotide #20.  
 XX  
 XX Human; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;  
 KW antisense oligonucleotide; phosphorothioate; regulation;  
 KW malignant tumour; cell cycle expression; hyperproliferative disease; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /+tag= a  
 FT /note= "phosphorothioate linkages"

```

XX  W09846272-A1.
XX
XX  22-OCT-1998.
XX
XX  14-APR-1998; 98WO-US007386.
XX
XX  14-APR-1997; 97US-00837201.
XX
XX  (ISIS-) ISIS PHARM INC.
XX
XX  Dean NM, McKay R, Miraglia L, Baker B;
XX
XX  WPI; 1998-603906/51.
XX
XX  Antisense oligonucleotides regulating Activating Protein 1 subunits -
XX  hydride with c-fos and c-jun mRNA, used for regulating metastasis, cell
XX  cycle expression and hyperproliferative disease.
XX
XX  Claim 5; Page 74; 120pp; English.
XX
XX  AAV69949 to AAV69977 represent antisense oligonucleotides which are
XX  specifically hybridisable with a region of a nucleic acid encoding human
XX  c-Fos protein. The antisense compound regulates the expression of the c-
XX  Fos protein. The present invention also describes antisense
XX  oligonucleotides which regulate the c-Jun protein. The antisense
XX  oligonucleotides are used for the diagnosis and treatment of diseases or
XX  disorders associated with Activating Protein 1 expression, of which c-Fos
XX  and c-Jun are subunits. The antisense oligonucleotides are used in
XX  compositions as c-Fos and/or c-Jun together with a carrier and a
XX  chemotherapeutic agent. They are used to regulate the expression of c-Fos
XX  or c-Jun in cells or tissues, preferably by inhibiting metastasis. They
XX  also regulate cell cycle expression and can be used to treat an animal
XX  with, or being prone to, a hyperproliferative disease
XX
XX  Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 725 AAGAGGGGACCTGCACCC 744
DB 20 AAGGGGAGGACGCGGACCC 1
RESULT 1755
AAV11263/C
ID AAV11263 standard; DNA; 20 BP.
AC AAV11263;
XX
XX  15-JUL-1998 (first entry)
XX
XX  Human MTS1 and MTS1B1-beta PCR primer #1.
XX
XX  MTS1, MTS1B1-beta; multiple tumour suppressor; diagnosis; cancer;
XX  germ-line mutation; familial melanoma locus; MLM; predisposition; ss.
XX
XX  Synthetic.
XX  Homo sapiens.
XX
XX  US5739027-A.
XX
XX  14-APR-1998.
XX
XX  07-JUN-1995; 95US-00487033.
XX
XX  18-MAR-1994; 94US-00214582.
XX
XX  18-MAR-1994; 94US-00215086.
XX
XX  18-MAR-1994; 94US-00215087.
XX
XX  14-APR-1994; 94US-00227369.
XX
XX  01-JUN-1994; 94US-00251938.

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PR  17-MAR-1995; 95WO-US003316.
XX
XX  (MYRI-) MYRIAD GENETICS INC.
XX
XX  Kamb A;
XX
XX  WPI; 1998-250421/22.
XX
XX  DNA specific for Multiple Tumour Suppressor 1B1-beta gene - are useful
XX  for the diagnosis of cancers related to MTS1B1-beta mutation(s) and their
XX  treatment.
XX
XX  Example 12; Col 85-86; 72pp; English.
XX
XX  Primers AAV11260-V11266 are used in the isolation of the human multiple
XX  tumour suppression protein, MTS1 and MTS1B1-beta. The MTS gene locus is
XX  also referred to as the familial melanoma (MLM) gene locus, located on
XX  human chromosome 9p21. Germ line mutations in MTS genes can be used in
XX  the diagnosis of predisposition to cancers, e.g. melanoma, leukemia,
XX  astrocytoma, glioblastoma, lymphoma, glioma, Hodgkin's lymphoma, CLL,
XX  and cancers of the pancreas, breast, thyroid, ovary, uterus, testis,
XX  kidney, stomach and rectum
XX
XX  Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 505 GAGGCTTCTGAGACGCT 524
DB 20 GAAAGCTTCTGACACGCT 1
RESULT 1756
AAZ18169
ID AAZ18169 standard; DNA; 20 BP.
AC AAZ18169;
XX
XX  11-OCT-1999 (first entry)
XX
XX  PTK 19 gene specific primer.
XX
XX  Genetic proximity; gene expression; cell characterisation; homeobox gene;
XX  genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
XX  kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
XX  primer; ss.
XX
XX  Synthetic.
XX  Homo sapiens.
XX
XX  WO9934016-A2.
XX
XX  08-JUL-1999.
XX
XX  28-DEC-1998; 98WO-IL000625.
XX
XX  29-DEC-1997; 97IL-00122793.
XX
XX  16-OCT-1998; 98IL-00126627.
XX
XX  (GENE-) GENENEA LTD.
XX
XX  Vider B;
XX
XX  WPI; 1999-419113/35.
XX
XX  P-PSDB; AAY14704.
XX
XX  Identifying and characterizing cells by comparing the pattern of gene
XX  expression in a selected gene family.
XX
XX  Claim 4; Page 46; 102pp; English.

```

CC The invention provides a new method for identifying and characterizing  
CC cells. The method for determining the genetic proximity of a first cell  
CC and a second cell comprises: (a) obtaining the first cell and the second  
CC cell; (b) determining in the first cell and the second cell the pattern  
CC of expression of genes in a selected gene family; and (c) calculating a  
CC proximity index using a specified formula. The methods can be used for  
CC characterizing cells, e.g. for determining the origin of a cell, its  
CC genetic status, whether it carries a genetic defect, or whether it is  
CC transformed. They can be used for detecting a selected genetic defect in  
CC an individual, e.g. a fetus. They can also be used for determining the  
CC effect of a selected treatment on a test cell. They can also be used for  
CC obtaining cells capable of expressing an homeobox related desired  
CC property. The method uses reverse transcriptase polymerase chain reaction  
CC (RT-PCR) for determining the pattern of gene expression in a selected  
CC gene family. Sequences AA217803-218342 represent primers that can be used  
CC in the RT-PCR reactions to determine the pattern of gene expression. The  
CC gene family can be selected from a set of homeobox genes, kinase genes,  
CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
CC superfamily genes or cadherin superfamily genes

XX Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

SO Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred.No.1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1024 AACCTGGCTGACTTTGGCCT 1043  
||||| |||||||  
Db 1 AACCTCGGGGACTTTGGGCT 20

RESULT 1757  
AA218167  
ID AA218167 standard; DNA; 20 BP.  
XX  
AC AA218167;  
XX  
DT 11-OCT-1999 (first entry)  
XX  
DE PTK 18 gene specific primer.  
XX  
KM Genetic proximity; gene expression; cell characterization; homeobox gene;  
KM genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
KM kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
KM primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN MO9934016-A2.  
XX  
PD 08-JUL-1999.  
XX  
PF 28-DEC-1998; 98WO-IL000625.  
XX  
PR 29-DEC-1997; 97IL-00122793.  
PR 16-OCT-1998; 98IL-00126627.  
XX  
PA (GENE-) GENENNA LTD.  
XX  
PI Valder B;  
XX  
DR WPI; 1999-419113/35.  
DR P-PSDB; AAY14702.  
XX  
PT Identifying and characterizing cells by comparing the pattern of gene  
PT expression in a selected gene family.  
XX  
PS Claim 4; Page 46; 102pp; English.  
XX  
CC The invention provides a new method for identifying and characterizing  
CC cells. The method for determining the genetic proximity of a first cell  
CC and a second cell comprises: (a) obtaining the first cell and the second  
CC cell; (b) determining in the first cell and the second cell the pattern  
CC of expression of genes in a selected gene family; and (c) calculating a  
CC proximity index using a specified formula. The methods can be used for

CC cell; (b) determining in the first cell and the second cell the pattern  
CC of expression of genes in a selected gene family; and (c) calculating a  
CC proximity index using a specified formula. The methods can be used for  
CC characterizing cells, e.g. for determining the origin of a cell, its  
CC genetic status, whether it carries a genetic defect, or whether it is  
CC transformed. They can be used for detecting a selected genetic defect in  
CC an individual, e.g. a fetus. They can also be used for determining the  
CC effect of a selected treatment on a test cell. They can also be used for  
CC obtaining cells capable of expressing an homeobox related desired  
CC property. The method uses reverse transcriptase polymerase chain reaction  
CC (RT-PCR) for determining the pattern of gene expression in a selected  
CC gene family. Sequences AA217803-218342 represent primers that can be used  
CC in the RT-PCR reactions to determine the pattern of gene expression. The  
CC gene family can be selected from a set of homeobox genes, kinase genes,  
CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
CC superfamily genes or cadherin superfamily genes

XX Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

SO Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred.No.1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1024 AACCTGGCTGACTTTGGCCT 1043  
||||| |||||||  
Db 1 AACCTCGGGGACTTTGGGCT 20

RESULT 1758  
AA218165  
ID AA218165 standard; DNA; 20 BP.  
XX  
AC AA218165;  
XX  
DT 11-OCT-1999 (first entry)  
XX  
DE PTK 17 gene specific primer.  
XX  
KM Genetic proximity; gene expression; cell characterization; homeobox gene;  
KM genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
KM kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
KM primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN MO9934016-A2.  
XX  
PD 08-JUL-1999.  
XX  
PF 28-DEC-1998; 98WO-IL000625.  
XX  
PR 29-DEC-1997; 97IL-00122793.  
PR 16-OCT-1998; 98IL-00126627.  
XX  
PA (GENE-) GENENNA LTD.  
XX  
PI Valder B;  
XX  
DR WPI; 1999-419113/35.  
DR P-PSDB; AAY14700.  
XX  
PT Identifying and characterizing cells by comparing the pattern of gene  
PT expression in a selected gene family.  
XX  
PS Claim 4; Page 46; 102pp; English.  
XX  
CC The invention provides a new method for identifying and characterizing  
CC cells. The method for determining the genetic proximity of a first cell  
CC and a second cell comprises: (a) obtaining the first cell and the second  
CC cell; (b) determining in the first cell and the second cell the pattern  
CC of expression of genes in a selected gene family; and (c) calculating a  
CC proximity index using a specified formula. The methods can be used for

CC characterizing cells, e.g. for determining the origin of a cell, its  
 CC genetic status, whether it carries a genetic defect, or whether it is  
 CC transformed. They can be used for detecting a selected genetic defect in  
 CC an individual, e.g. a fetus. They can also be used for determining the  
 CC effect of a selected treatment on a test cell. They can also be used for  
 CC obtaining cells capable of expressing an homeobox related desi  
 CC property. The method uses reverse transcriptase polymerase chain reaction  
 CC (RT-PCR) for determining the pattern of gene expression in a selected  
 CC gene family. Sequences AA217803-218342 represent primers that can be used  
 CC in the RT-PCR reactions to determine the pattern of gene expression. The  
 CC gene family can be selected from a set of homeobox genes, kinase genes,  
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
 CC superfamily genes or cadherin superfamily genes

XX Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1024 AAGCTGGCTGACTTTGGCCT 1043

DB 1 AAGCTGGGAGACTTTGGGCT 20

RESULT 1759

AAZ20186/c

AAZ20188 standard; cDNA; 20 BP.

AAZ20188;

05-JAN-2000 (first entry)

Pregnancy associated glycoprotein (PAG) reverse primer B.

PAG; pregnancy associated glycoprotein; cattle; diagnosis; PCR; primer;  
 ss.

Synthetic.

Bos taurus.

WO9497934-A2.

23-SEP-1999.

19-MAR-1999; 99MO-US006038.

20-MAR-1998; 98US-0078783P.

28-OCT-1998; 98US-0106188P.

(UMOR) UNITV MISSOURI.

Roberts RM, Green JA, Xie S;

WPI: 1999-601132/51.

New bovine polypeptides useful for early diagnosis of pregnancy.

Example 3; Page 52; 136pp; English.

This reverse primer was used with a forward primer (see AAZ20187) in the  
 PCR amplification of a poorly conserved 407 bp fragment of bovine  
 pregnancy associated glycoprotein (PAG) PAG1.5 6 and 7 cDNA (see  
 AAZ20191, AAZ20164, AAZ20165, AAZ20166). Another primer pair (see  
 AAZ20185-86) was used to amplify a poorly conserved 536 bp fragment of  
 bovine PAG2, 4, 8, 9 or 11 cDNA (see AAZ20162, AAZ20163, AAZ20179,  
 AAZ20167, AAZ20181). The amplified fragments were used as probes in  
 experiments to demonstrate that certain PAGs, including bovine PAG4, 5, 7  
 and 9 (see AAZ20163-67), are expressed in trophoblast binucleate cells  
 and in the syncytium formed between trophoblast and uterine epithelium.  
 Such PAGs are useful in immunoassays of the invention for the early  
 diagnosis of pregnancy

SQ Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 667 GGCAAAAGCAAGCTCAGAGA 686

DB 20 GGCAAAACAGGCTCAGAAA 1

RESULT 1760

AAZ11521/c

AAZ11521 standard; DNA; 20 BP.

AAZ11521;

05-NOV-1999 (first entry)

Human c-raf kinase antisense oligo ISIS # 5149.

Human; raf; diagnosis; abnormal proliferative state; hyperproliferation;  
 cancer; psoriasis; blood vessel restenosis; c-raf kinase; antisense; ss.

Synthetic.

Homo sapiens.

US5952229-A.

14-SEP-1999.

26-NOV-1996; 96US-00756806.

31-MAY-1994; 94US-00250856.

31-MAY-1995; 95MO-US007111.

(ISIS-) ISIS PHARM INC.

Boggs RT, Monia BP;

WPI: 1999-527018/44.

Oligonucleotides targeted to human raf mRNA useful for treating and  
 diagnosing abnormal proliferative states and inhibiting raf expression.

Disclosure; Col 9; 29pp; English.

The invention provides antisense oligonucleotides targeted to mRNA  
 encoding human raf and capable of inhibiting raf expression. The  
 antisense oligonucleotides are useful for treating and diagnosing  
 abnormal proliferative states and hyperproliferation (e.g. cancer,  
 psoriasis, or blood vessel restenosis), and inhibiting raf expression.  
 Sequences AAZ11511-537 and AAZ11565-573 represent antisense  
 oligonucleotides for human c-raf kinase

Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1186 ATGGCCACAGGCGTCCCT 1205

DB 20 ATGGCTCCAGGCGTCCACT 1

RESULT 1761

AAZ07001/c

AAZ07001 standard; DNA; 20 BP.

AAZ07001;

15-NOV-1999 (first entry)

```
XX Human GABA B receptor subunit HG20 PCR primer ngfl7-.
DE
XX
XX Gamma-amino-butyric acid B receptor subunit; HG20; GABABR1a; depression;
KM epilepsy; neuropsychiatric disorder; dementia; muscular contraction;
KM central nervous system disorder; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX MO9940114-A1.
XX
XX 12-AUG-1999.
XX
XX 03-FEB-1999; 99WO-US002361.
XX
XX 05-FEB-1998; 98US-0073767P.
XX
XX (MERI ) MERCK & CO INC.
PA (MERI ) MERCK FROST CANADA INC.
PA (UTTE-) UNIV TEXAS HEALTH SCI CENT SAN ANTONI.
PA (USSH ) US NAT INST OF HEALTH.
XX
XX Liu Q, McDonald T, Bonnett TP, Ng GYK, Kolakowski LF, Clark J,
PI Bonner TJ;
PI
XX WPI; 1999-527300/44.
XX
XX New DNA encoding human and murine receptor subunits, useful for
PT identifying agonists and antagonists for treatment of depression,
PT epilepsy and neuropsychiatric disorders.
XX
XX Example 22; Page 85; 128pp; English.
XX
XX The present invention describes two gamma-amino-butyric acid (GABA) B
CC receptor (GABABR) subunits designated HG20 and GABABR1a. Cells expressing
CC the new receptor subunits are useful for identifying GABABR agonists and
CC antagonists. HG20 proteins and their antagonists are useful for
CC inhibiting HG20 or GABABR function, useful for treating depression,
CC epilepsy, neuropsychiatric disorders, dementias, muscular contractions,
CC and central nervous system disorders. The present sequence represents a
CC PCR primer for human HG20, which is used in the exemplification of the
CC present invention
XX
XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 901 ATGCACACGCTGAACCTGTT 920
DB 20 AGGCACAGCTGGAACCTGTT 1
RESULT 1762
AAX58122
ID AAX58122 standard; DNA; 20 BP.
XX
XX AAX58122;
XX
XX 21-JUL-1999 (first entry)
XX
XX Human iPPK-2 antisense oligonucleotide.
XX
XX Human iPPK-2; cancer malignancy diagnostic assay; inflammatory disease;
KM inducible phosphofructokinase-2; tumour; malignant cancer; diagnosis;
KM therapy; cancer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX MO9923108-A1.
XX
XX
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```
XX 14-MAY-1999.
XX
XX 30-OCT-1998; 98WO-US023155.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX (PICO-) PICOMER INST MEDICAL RES.
PA (CHES/) CHESNEY J A.
PA (MITC/) MITCHELL R A.
XX
XX Bucala RJ;
XX
XX WPI; 1999-313301/26.
XX
XX Cancer malignancy diagnostic assay useful for diagnosis of malignant
PT cancer and, in treatment of cancer and inflammatory disease.
XX
XX Claim 4; Page 13; 41pp; English.
XX
XX This sequence represents a human iPPK-2 antisense oligonucleotide. The
CC invention relates to a cancer malignancy diagnostic assay for determining
CC the presence of inducible phosphofructokinase-2 (iPPK-2) specific
CC sequences in a sample of a body or tumour fluid or tissue. The assay
CC comprises obtaining a sample of a body or tumour fluid or tissue and
CC performing a sequence identity assay to look for the presence of iPPK-2
CC specific sequences. The method is useful for diagnosis of malignant
CC cancer by detecting the presence of iPPK-2 specific sequences. Antisense
CC iPPK-2 oligonucleotides are useful for treatment of cancer and
CC inflammatory disease. Antagonists of iPPK-2, such as an iPPK-2 enzyme
CC inhibitor or anti-iPPK-2 antibody are also useful for treatment of cancer
CC and inflammatory disease
XX
XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1679 CCAACTACATCTTCCTGCT 1698
DB 1 CCAACGGCATTCTTCGCGCT 20
RESULT 1763
AAX58144/c
ID AAX58144 standard; DNA; 20 BP.
XX
XX AAX58144;
XX
XX 21-JUL-1999 (first entry)
XX
XX Human iPPK-2 antisense oligonucleotide.
XX
XX Human iPPK-2; cancer malignancy diagnostic assay; inflammatory disease;
KM inducible phosphofructokinase-2; tumour; malignant cancer; diagnosis;
KM therapy; cancer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX MO9923108-A1.
XX
XX 14-MAY-1999.
XX
XX 30-OCT-1998; 98WO-US023155.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX (PICO-) PICOMER INST MEDICAL RES.
PA (CHES/) CHESNEY J A.
PA (MITC/) MITCHELL R A.
XX
XX
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PI Bucala RJ;
XX
XX WPI; 1999-313301/26.
DR
XX Cancer malignancy diagnostic assay useful for diagnosis of malignant
PT cancer and, in treatment of cancer and inflammatory disease.
XX
XX Example 4; Page 10; 41pp; English.
XX
XX This sequence represents a human iPKF-2 antisense oligonucleotide. The
CC invention relates to a cancer malignancy diagnostic assay for determining
CC the presence of inducible phosphotyrosine-2 (iPKF-2) specific
CC sequences in a sample of a body or tumour fluid or tissue. The assay
CC comprises obtaining a sample of a body or tumour fluid or tissue and
CC performing a sequence identity assay to look for the presence of iPKF-2
CC specific sequences. The method is useful for diagnosis of malignant
CC cancer by detecting the presence of iPKF-2 specific sequences. Antisense
CC iPKF-2 oligonucleotides are useful for treatment of cancer and
CC inflammatory disease. Antagonists of iPKF-2, such as an iPKF-2 enzyme
CC inhibitor or anti-iPKF-2 antibody are also useful for treatment of cancer
CC and inflammatory disease
XX
XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1679 CCAACTACATCTTCCCTGCT 1698
DB |||||
20 CCAACGCATCTTCCGCGCT 1
RESULT 1764
AAV74243/C
ID AAV74243 standard; DNA; 20 BP.
XX
XX AAV74243;
AC
XX 20-MAR-2003 (revised)
DT
DT 15-MAR-1999 (first entry)
XX
XX Cpg-N motif O-ODN 2001 DNA.
DE
XX Cpg-N motif; immunostimulation; antigen; Cpg-S motif; immunisation; ODN;
KM viral antigen; bacterial antigen; parasite; therapeutic; growth factor;
KM toxin; tumour suppressor; cytokine; apoptotic protein; interferon;
KM hormone; clotting factor; ligand; receptor; oligodeoxynucleotide; ss.
XX
XX Synthetic.
XX
XX W09852581-A1.
XX
XX 26-NOV-1998.
XX
XX 20-MAY-1998; 98WO-US010408.
XX
XX 20-MAY-1997; 97US-0047209P.
XX
XX 20-MAY-1997; 97US-0047233P.
XX
XX (OTTA-) OTTAWA CIVIC HOSPITAL LOEB RES INST.
XX (IOWA-) UNIV IOWA RES FOUND.
XX (QIAG-) QIAGEN GMBH.
XX
XX Davis HL, Krieg AM, Schorr J, Wu T;
XX
XX WPI; 1999-059712/05.
XX
XX Use of neutralising Cpg and stimulating Cpg motifs in DNA vectors - for
PT enhancing the immunostimulatory effect of an antigen or enhancing the
PT expression of a therapeutic polypeptide.
XX
XX Example 1; Page 64; 109pp; English.
PS
```

```
XX
XX AAV74237-V74253 are oligodeoxynucleotide (ODN) primers used to describe a
CC method for enhancing the immunostimulatory effect of an antigen encoded
CC by nucleic acid contained in a nucleic acid construct. The method
CC involves determining the Cpg-N and Cpg-S motifs present in the construct,
CC removing neutralising Cpg (Cpg-N) motifs and optionally inserting a
CC stimulatory Cpg (Cpg-S) motifs in the construct, thereby producing a
CC nucleic acid construct having enhanced immunostimulatory efficacy. The
CC method can be used for immunisation against viral antigens, e.g. from
CC hepatitis B virus (HBV), bacterial antigens or an antigen derived from a
CC parasite. They can also be used for expression of a therapeutic
CC polypeptide, e.g. growth factors, toxins, tumour suppressors, cytokines,
CC apoptotic proteins, interferons, hormones, clotting factors, ligands and
CC receptors. (Updated on 20-MAR-2003 to correct PA field.)
XX
XX Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTGAGCCGCGCCTCCGCTC 574
DB |||||
20 CCGCGCCGCGCGCGCGCC 1
RESULT 1765
AAV74294/C
ID AAV74294 standard; DNA; 20 BP.
XX
XX AAV74294;
AC
XX 29-MAR-1999 (first entry)
DT
XX
XX ICAM-1 antisense oligonucleotide primer #2.
DE
XX
XX ICAM-1; intercellular adhesion molecule-1; antisense; primer; prevention;
KM perfusion injury; transplantation; pre-operative treatment; donor; organ;
KM ss.
XX
XX Synthetic.
XX
XX DEL19745666-A1.
XX
XX 14-JAN-1999.
XX
XX 17-OCT-1997; 97DE-01045666.
XX
XX 07-JUL-1997; 97DE-01028923.
XX
XX (DELB-) DELBRUECK CENT MOLEKULARE MEDIZIN MAX.
XX
XX Haller H;
XX
XX WPI; 1999-082662/08.
XX
XX Use of antisense oligonucleotide against ICAM-1 - for preventing
PT perfusion injury during transplantation of e.g. kidney, heart, lung or
PT pancreas.
XX
XX Claim 4; Page 2; 4pp; German.
XX
XX AAV74293-V74297 are antisense oligonucleotide primers used against the
CC intercellular adhesion molecule ICAM-1 for preventing perfusion injury
CC during transplantation. The oligonucleotides are used for pre-operative
CC treatment of the transplant donor or for pre-treatment of the donor organ
CC (preferably kidney, heart, lung or pancreas) before transplantation
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
PS
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QY      226 GAGAGTGTGCTGCTGGCGG 245
KW      ||||| ||||| ||||| |||||
XX      20 GAGAGGCGGAGGTGTGGGGG 1
OS
XX
Db
RESULT 1766
AAV70608/C
ID      AAV70608 standard; DNA; 20 BP.
XX
AC      AAV70608;
XX
DT      20-MAR-2003 (revised)
DT      03-FEB-1999 (first entry)
XX
DE      PCR primer used to isolate murine MST1L-beta gene.
XX
KW      Human; multiple tumour suppressor 1 gene; MST1, cancer; PCR primer; ss.
XX
OS      Synthetic.
OS      Mus sp.
XX
PN      US5843756-A.
XX
PD      01-DEC-1998.
XX
PF      28-JUN-1995; 95US-00508735.
XX
PR      17-MAR-1995; 95WO-US003316.
PR      07-JUN-1995; 95US-00487033.
XX
PA      (MYRI-) MYRIAD GENETICS INC.
XX
PI      Jiang P, Kamb A, Stone S;
XX
DR      WPI; 1999-044585/04.
XX
PT      Mouse multiple tumour suppressor gene segment - useful for primer design.
XX
PS      Example 13; Col 53; 80bp; English.
XX
CC      Oligonucleotides AAV70607-11 were used to isolate nucleic acid encoding a
CC      murine multiple tumour suppressor 1E1-beta (MST1E1-beta) protein. Primers
CC      designed from the gene can be used to design primers to detect
CC      abnormalities i.e. polymorphisms which may predispose towards
CC      malignancies such as melanoma, leukaemia, astrocytoma, lymphoma, glioma,
CC      as well as tumours of e.g. the breast, thyroid, pancreas, uterus and
CC      kidneys. (Updated on 20-MAR-2003 to correct PR field.) (Updated on 20-MAR-
CC      -2003 to correct PR field.)
XX
SQ      Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY      505 GAGGGCTACCTGGAGAACT 524
Db      ||||| ||||| ||||| |||||
      20 GAAGGCTTCCTGGACACGCT 1
RESULT 1767
AAZ02575
ID      AAZ02575 standard; DNA; 20 BP.
XX
AC      AAZ02575;
XX
DT      07-OCT-1999 (first entry)
XX
DE      PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW      Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW      paratrachoma; inclusion conjunctivitis; genital disease; perithenaritis;
KW      paratrachoma; inclusion conjunctivitis; genital disease; perithenaritis;

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KW      nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW      Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
OS      Synthetic.
XX      Chlamydia trachomatis.
XX
FN      WO9928475-A2.
XX
PD      10-JUN-1999.
XX
PF      27-NOV-1998; 98WO-IB001939.
XX
PR      28-NOV-1997; 97FR-00015041.
PR      17-DEC-1997; 97FR-00016034.
PR      04-NOV-1998; 98US-0107077P.
XX
PA      (GEST ) GENSET.
XX
PI      Griffais R;
XX
DR      WPI; 1999-371125/31.
XX
PT      Genome sequence of Chlamydia trachomatis.
XX
PS      Disclosure; Page 1536; 1755pp; English.
XX
CC      PCR primers AAZ01426-206209 were used to amplify open reading frames
CC      (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC      encode polypeptides (see AAY56754-Y37949) which can be used as vaccines
CC      against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC      be used to control growth of the microorganism. Chlamydia trachomatis is
CC      responsible for a large number of diseases, e.g. eye diseases such as
CC      conjunctivitis; genital diseases such as nongonococcal urethritis,
CC      epididymitis, cervicitis, salpingitis, perithenaritis, Bartholinitis,
CC      pneumonia; in breast feeding infants; and venereal lymphogranulomatosis.
CC      The polypeptides of the invention may be of use in treating these
CC      diseases
XX
SQ      Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY      1387 CTCCTCACCAAGCTGTGCA 1406
Db      ||||| ||||| ||||| |||||
      1 CTCGAAACAAGCTGTCCA 20
RESULT 1768
AAZ01495
ID      AAZ01495 standard; DNA; 20 BP.
XX
AC      AAZ01495;
XX
DT      07-OCT-1999 (first entry)
XX
DE      PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW      Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW      paratrachoma; inclusion conjunctivitis; genital disease; perithenaritis;
KW      nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW      Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
OS      Synthetic.
OS      Chlamydia trachomatis.
XX
FN      WO9928475-A2.
XX
PD      10-JUN-1999.
XX
PF      27-NOV-1998; 98WO-IB001939.

```





CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases

XX  
SQ Sequence 20 BP; 9 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Db 283 GGGGAAGCTTCGTTGACAG 302  
20 GGGGATCTTCGTTGTTG 1

RESULT 1771  
AAK00531/C  
ID AAK00531 standard; DNA; 20 BP.  
AC AAK00531;  
XX  
XX 30-MAR-1999 (first entry)  
XX  
DE Antisense oligonucleotide ISIS#1939 targeted to ICAM-1.  
XX  
XX Target; antisense; selective rank; inhibition; ranking; stability;  
XX interaction; intercellular adhesion molecule; ICAM; ss.  
XX  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH 1. .20  
FT misc\_feature /\*tag= a  
FT /note= "contains phosphorothioate internucleotide  
FT linkages"  
XX  
XX US5856103-A.  
XX  
XX 05-JAN-1999.  
XX  
XX 03-MAR-1997; 97US-00808474.  
XX  
XX 07-OCT-1994; 94US-00320507.  
XX  
XX (TEXA ) UNIV TEXAS.  
XX  
XX Clark CL, Gray DM;  
XX  
XX WPI; 1999-105098/09.  
XX  
XX Selectively ranking nucleic acid molecules, for inhibitory efficiency -  
PT comprises determining the fraction a set of nearest-neighbour nucleic  
PT acid base pair types in a target sequence zone, substituting nearest-  
PT neighbour nucleic acid base pair fractions to determine the fractions and  
PT multiplying.  
XX  
XX Example 1; Col 21-22; 72pp; English.

XX This oligonucleotide represents an antisense oligonucleotides (ASO)  
CC targeted to a region in the intercellular adhesion molecule (ICAM)-1 gene  
CC which is generated by a method of selectively ranking nucleic acid  
CC molecules for inhibitory efficiency. The method comprises: (a)  
CC determining the fraction of each of a set of 13 nearest-neighbour nucleic  
CC acid base pair types in a target sequence zone RNA:ASO-DNA hybrid nucleic  
CC acid sequence; (b) substituting nearest-neighbour nucleic acid base pair  
CC fractions into formulas to determine the fractions of each of a series of  
CC 13 nearest-neighbour nucleic acid base pair types to provide determined  
CC fractions; and (c) multiplying the fractions of the 13 nearest-neighbour  
CC nucleic acid base pair types by a stability ranking to produce a nucleic acid  
CC antisense sequence; where the results are ordered to produce a ranking.  
CC The process is used to rank nucleic acid sequences based on the stability

CC of nucleic acid oligomer binding interactions to select sequence zones  
CC for antisense targeting  
CC  
XX  
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Db 226 GAGAGTGAGTGAGTGAGCG 245  
20 GAGAGGAGAGAGTGAGTGAGG 1

RESULT 1772  
AAK21345  
ID AAK21345 standard; DNA; 20 BP.  
AC AAK21345;  
XX  
XX 21-MAY-1999 (first entry)  
XX  
XX Primer #2 for amplifying apolipoprotein E gene.  
XX  
XX Primer; PCR; amplification; apolipoprotein E; human; brain; diagnosis;  
XX Alzheimer's disease; mutation; gene expression; polymorphism; promoter;  
XX allele; heterozygote; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX WO9901574-A1.  
XX  
XX 14-JAN-1999.  
XX  
XX 30-JUN-1998; 98WO-FR001394.  
XX  
XX 01-JUL-1997; 97FR-00008284.  
XX  
XX (INSP ) INST PASTEUR LITTE.  
XX (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
XX  
XX Charrier-Harlin M, Lambert J, Amouyel P;  
XX  
XX WPI; 1999-106073/09.  
XX  
XX Diagnosing Alzheimer's disease - by detecting mutations in the regulatory  
PT region of the apo E gene, or levels of apo E allele expression.  
XX  
XX Example 3; Page 18; 48pp; French.

XX Primers AAK21344-X21345 were used to PCR amplify a 375 bp fragment of the  
CC apolipoprotein E gene. The invention relates to the diagnosis of  
CC Alzheimer's disease (AD) by detecting one or more mutations, in the  
CC genomic region that regulates expression of the apolipoprotein E (apo E),  
CC that results in: (a) altered gene expression relative to a control  
CC population, or (b) altered relative expression of the alleles of apo E.  
CC Alternatively AD is detected by determining the levels of epsilon-2, -3  
CC or -4 alleles or mutations in the Th1/B47cs sequence (a polymorphism in  
CC the promoter region). The T allele of Th1/B47cs is associated with  
CC increased risk of AD (independently of the effect of the epsilon 4  
CC allele) and increases the risk associated with epsilon 4 in epsilon  
CC 4/epsilon 3 heterozygotes

XX  
SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Db 699 ACTCAAGAGATCAGACTGG 718  
1 ACTCAAGATCCGACTTG 20

RESULT 1773

AAZ10728/c  
ID AAZ10728 standard; DNA; 20 BP.

XX AAZ10728;

DT 23-NOV-1999 (first entry)

XX Forward PCR primer used to amplify exon 9 of human HKNG1.

XX HKNG1; Hong Kong new gene 1; bipolar affective disorder; BAD;

XX neuropsychiatric disorder; early-onset autosomal dominant myopia;

XX schizophrenia; splice variant; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX MO9947535-A1.

XX 23-SEP-1999.

XX 16-MAR-1999; 99WO-US005606.

XX 16-MAR-1998; 98US-0078044P.

PR 05-JUN-1998; 98US-0088312P.

PR 28-OCT-1998; 98US-0106056P.

PR 22-JAN-1999; 99US-0026134.

XX (MILL-) MILLENNIUM PHARM INC.

PA (REGC) CALIFORNIA.

XX Chen H, Freimer NB;

XX WPI, 1999-562047/47.

XX New HKNG1 polynucleotides useful in diagnosis and treatment of

PT neuropsychiatric disorders, e.g. bipolar affective disorders and

PT schizophrenia.

XX Disclosure; Page 57; 205pp; English.

XX PCR primers AAZ10708-33 were used to amplify exons 1 to 11 of human HKNG1

XX (Hong Kong new gene 1). HKNG1 is a gene associated with bipolar affective

XX disorder (BAD). HKNG1 polynucleotides are useful to identify compounds

XX modulating HKNG1 gene expression or HKNG1 polypeptide expression/

XX activity. Compounds inhibiting or enhancing HKNG1 gene expression or

XX activity in individuals can then be administered therapeutically to treat

XX HKNG1-mediated disorders, especially neuropsychiatric disorders e.g. BAD,

XX schizophrenia, or HKNG1-mediated myopia disorders, such as early-onset

XX autosomal dominant myopia. The polynucleotides can be used in gene

XX therapy techniques to treat such disorders. They are also useful in

XX diapaoids to identify individuals having, or at risk of developing, HKNG1

XX -mediated disorders due to mutations in the HKNG1 gene. Such mutations

XX especially result in the production of a protein with a different

XX sequence to the human full-length HKNG1 polypeptide or splice variant

XX residue 202 or 184. The polynucleotides are also useful in gene mapping,

XX to produce probes or primers to identify similar sequences (e.g. mutants

XX or sequences from different species) and to produce transgenic animals

XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

XX

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DT	14-JUN-1999	(first entry)
XX		
DE	Tumour necrosis factor alpha antisense oligonucleotide.	
XX		
KW	Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;	
KM	inhibition; expression; treatment; disease; disorder; ss.	
XX		
OS	Synthetic.	
XX		
OS	Homo sapiens.	
XX		
PN	W09901139-A1.	
XX		
PD	14-JAN-1999.	
XX		
PF	02-JUL-1998; 98WO-US013711.	
XX		
PR	03-JUL-1997; 97US-0051705P.	
XX		
PA	(UYUE-) UNITV JEFFERSON THOMAS.	
XX		
PI	Tu G, Israel Y;	
XX		
DR	WPI: 1999-105767/09.	
XX		
PT	Generation of antisense oligonucleotides - by specifically targeting a	
PT	GGGA motif found in mRNA sequences.	
XX		
PS	Example 2; Page 37; 55pp; English.	
XX		
CC	Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-	
CC	alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50	
CC	nucleotides, 90% of which are complementary to a region of mRNA	
CC	containing a GGGA sequence motif. The ASO is used to inhibit expression	
CC	of a gene in an animal and for treating the animal when afflicted with a	
CC	disease or disorder characterised by the presence of an mRNA from a gene	
CC	containing a GGGA motif. The ASO are specifically targeted to a GGGA	
CC	sequence motif found in mRNA from a gene. A study of known ASO has shown	
CC	that at least half of the most efficacious ASO's contain one or more TCCC	
CC	motifs. This ASO comprises a TCCC motif followed by a cytosine residue	
CC	and corresponds to a region of the human ICAM-1 3' untranslated region	
XX		
SO	Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;	
XX		
Query Match	0.8%; Score 13.6; DB 1;	Length 20;
Best Local Similarity	80.0%; Pred. No. 1.1e+03;	
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;		
OY	226 GAGAGTGTGTGTGTGTGCGG 245	
Db	20 GAGAGCGGAGAGTGTGTGCGG 1	
RESULT 1776		
ID	AA95935 standard; DNA; 20 BP.	
XX		
AC	AA95935;	
XX		
DT	13-SEP-1999 (first entry)	
XX		
DE	PCR primer used to amplify an ORF of Chlamydia pneumoniae.	
XX		
KW	Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;	
KM	sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;	
XX	neutralising epitope; PCR primer; ss.	
XX		
OS	Synthetic.	
XX		
OS	Chlamydia pneumoniae.	
XX		
EN	W09927105-A2.	
XX		
PD	03-JUN-1999.	
XX		

PF	20-NOV-1998;	98WO-IB001890.
XX		
PR	21-NOV-1997;	97FR-00014673.
PR	04-NOV-1998;	98US-0107078P.
XX		
PA	(GEST )	GENSET.
XX		
PI	Griffais R;	
XX		
DR	WPI, 1999-357842/30.	
XX		
PT	Genome sequence of Chlamydia pneumoniae.	
XX		
XX	Page 1787; Disclosure; 1912p; English.	
XX		
PS	AA091991-X97517 represent PCR primers used to amplify open reading frames	
CC	and other nucleic acid sequences from the genome of Chlamydia pneumoniae	
CC	(see AA091990). C. pneumoniae causes respiratory disease such as	
CC	pneumonia and bronchitis and is thought to be a contributing factor in	
CC	heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema	
CC	nodosum or pharyngitis. The polypeptides encoded by the open reading	
CC	frames of C. pneumoniae genome (see AA091991- AA091999) can be used	
CC	in immunogenic compositions as vaccines. Vectors containing C. pneumoniae	
CC	nucleotide sequences can also be used as immunogenic compositions,	
CC	especially where the vector directs the expression of a neutralising	
CC	epitope of C. pneumoniae	
SQ	Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;	
	Query Match	0.8%; Score 13.6; DB 1; Length 20;
	Best Local Similarity	80.0%; Pred.No.1.1e+03;
	Matches	16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY	953 GCCACCGGACAGAGTGCTA 972	
Db	1 GCTATCGGACAGATGATGCTA 20	
RESULT 1777		
AA092771/c		
ID	AA092771 standard; DNA; 20 BP.	
XX	AA092771;	
AC		
XX		
DT	13-SEP-1999 (first entry)	
XX		
DE	PCR primer used to amplify an ORF of Chlamydia pneumoniae.	
XX		
KW	Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;	
KW	sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;	
KW	neutralising epitope; PCR primer; ss.	
XX		
OS	Synthetic.	
OS	Chlamydia pneumoniae.	
XX		
PN	W09927105-A2.	
XX		
PD	03-JUN-1999.	
XX		
PF	20-NOV-1998; 98WO-IB001890.	
XX		
PR	21-NOV-1997; 97FR-00014673.	
PR	04-NOV-1998; 98US-0107078P.	
XX		
PA	(GEST )	GENSET.
XX		
PI	Griffais R;	
XX		
DR	WPI; 1999-357842/30.	
XX		
PT	Genome sequence of Chlamydia pneumoniae.	
XX		
PS	Page 1537; Disclosure; 1912p; English.	

XX AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotide sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae  
XX

XX Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 405 GTCTCCAGTCGAGTCGCTA 424  
Db 20 GTCTCTATGAGATTGCGGA 1

RESULT 1778  
AAX94323/c  
ID AAX94323 standard; DNA; 20 BP.  
XX  
AC AAX94323;  
XX  
DT 13-SEP-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.  
XX  
PA Synthetic.  
XX Chlamydia pneumoniae.  
OS  
OS  
PN WO9927105-A2.  
XX  
PD 03-JUN-1999.  
XX  
PF 20-NOV-1998; 98WO-IB001890.  
XX  
PR 21-NOV-1997; 97FR-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
XX (BEST ) GENSET.  
XX  
PI Griffiths R;  
XX  
DR WPI, 1999-357842/30.  
XX  
PT Genome sequence of Chlamydia pneumoniae.  
XX  
PS Page 1661; Disclosure; 1912pp; English.  
XX  
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotide sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae  
XX  
SQ Sequence 20 BP; 9 A; 0 C; 10 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1684 TACATCTTCCCTGCTTACTC 1703  
Db 20 TACTTCTTCCCTGCTTCTC 1

RESULT 1779  
AAX94068/c  
ID AAX94068 standard; DNA; 20 BP.  
XX  
AC AAX94068;  
XX  
DT 13-SEP-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.  
XX  
PA Synthetic.  
XX Chlamydia pneumoniae.  
OS  
OS  
PN WO9927105-A2.  
XX  
PD 03-JUN-1999.  
XX  
PF 20-NOV-1998; 98WO-IB001890.  
XX  
PR 21-NOV-1997; 97FR-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
XX (BEST ) GENSET.  
XX  
PI Griffiths R;  
XX  
DR WPI, 1999-357842/30.  
XX  
PT Genome sequence of Chlamydia pneumoniae.  
XX  
PS Page 1641; Disclosure; 1912pp; English.  
XX  
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotide sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 154 CTGTCAATGACACTCGGAGG 173  
Db 20 CTGTGATTACACACCGGAGG 1

RESULT 1780  
AAX96741  
ID AAX96741 standard; DNA; 20 BP.  
XX

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AC  AAX96741;
XX
XX  13-SEP-1999 (first entry)
DT
XX
DE  PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX  Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KM  sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KM  neutralising epitope; PCR primer; ss.
XX
XX  Synthetic.
OS  Chlamydia pneumoniae.
XX
XX  MO9927105-A2.
XX
XX  03-JUN-1999.
XX
XX  20-NOV-1998; 98WO-IB001890.
XX
XX  21-NOV-1997; 97FR-00014673.
PR  04-NOV-1998; 98US-0107078P.
XX
XX  (GENSET ) GENSET.
XX
XX  Griffiths R;
PI
XX
XX  WPI; 1999-357842/30.
DR
XX
XX  Genome sequence of Chlamydia pneumoniae.
PT
XX
XX  Page 1849; Disclosure; 1912pp; English.
XX
XX  AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC  and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC  (see AAX91990) . C. pneumoniae causes respiratory disease such as
CC  pneumonia and bronchitis and is thought to be a contributing factor in
CC  heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC  nodosum or pharyngitis. The polypeptides encoded by the open reading
CC  frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC  in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC  nucleotide sequences can also be used as immunogenic compositions.
CC  especially where the vector directs the expression of a neutralising
CC  epitope of C. pneumoniae
XX
XX  Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY  761 CCTGCTCAAGACCTCAAA 780
Db  1 CGCTGCTCAAGAACATCAGA 20
XX
XX  RESULT 1781
XX  AAX9621/c
XX  ID AAX96621 standard; DNA; 20 BP.
XX
XX  AAX96621;
XX
XX  13-SEP-1999 (first entry)
DT
XX
XX  PCR primer used to amplify an ORF of Chlamydia pneumoniae.
DE
XX
XX  Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KM  sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KM  neutralising epitope; PCR primer; ss.
XX
XX  Synthetic.
OS  Chlamydia pneumoniae.
XX
XX  MO9927105-A2.
XX
XX  WPI; 1999-357842/30.
XX

```

```

XX
XX  03-JUN-1999.
PD
XX
XX  20-NOV-1998; 98WO-IB001890.
PF
XX
XX  21-NOV-1997; 97FR-00014673.
PR  04-NOV-1998; 98US-0107078P.
XX
XX  (GENSET ) GENSET.
XX
XX  Griffiths R;
PI
XX
XX  WPI; 1999-357842/30.
DR
XX
XX  Genome sequence of Chlamydia pneumoniae.
PT
XX
XX  Page 1840; Disclosure; 1912pp; English.
XX
XX  AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC  and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC  (see AAX91990) . C. pneumoniae causes respiratory disease such as
CC  pneumonia and bronchitis and is thought to be a contributing factor in
CC  heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC  nodosum or pharyngitis. The polypeptides encoded by the open reading
CC  frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC  in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC  nucleotide sequences can also be used as immunogenic compositions.
CC  especially where the vector directs the expression of a neutralising
CC  epitope of C. pneumoniae
XX
XX  Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY  542 TCTTGACAGCCCTCAGC 561
Db  20 TATTTGTCAGCCCAACACC 1
XX
XX  RESULT 1782
XX  AAX95259
XX  ID AAX95259 standard; DNA; 20 BP.
XX
XX  AAX95259;
XX
XX  13-SEP-1999 (first entry)
DT
XX
XX  PCR primer used to amplify an ORF of Chlamydia pneumoniae.
DE
XX
XX  Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KM  sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KM  neutralising epitope; PCR primer; ss.
XX
XX  Synthetic.
OS  Chlamydia pneumoniae.
XX
XX  MO9927105-A2.
XX
XX  03-JUN-1999.
XX
XX  20-NOV-1998; 98WO-IB001890.
XX
XX  21-NOV-1997; 97FR-00014673.
PR  04-NOV-1998; 98US-0107078P.
XX
XX  (GENSET ) GENSET.
XX
XX  Griffiths R;
PI
XX
XX  WPI; 1999-357842/30.
XX

```



```
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 505 GAGGCTTACTGGAGAGCT 524
Db 20 GAGGCTTCTGACACGCT 1

RESULT 1785
AAZ57446/c
ID AAZ57446 standard; DNA; 20 BP.
XX
XX AAZ57446;
AC
XX 10-APR-2000 (first entry)
DT
XX
DE Phosphorothioate oligonucleotide SEQ ID NO:5.
XX
KM Phosphorothioate; antisense oligonucleotide; triester oligonucleotide;
KW bioreversible phosphate blocking group; therapeutic; diagnosis; ss.
XX
OS Synthetic.
XX
XX Key location/Qualifiers
FH modified_base 1..18
FT /*tag= a
FT /note= "phosphorothioate linkages"
XX
XX MO3964434-A1.
XX
XX 16-DEC-1999.
PD
XX
XX 10-JUN-1999; 99WO-US013141.
XX
XX 11-JUN-1998; 98US-00095822.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Guzaev A;
XX
XX WPI; 2000-116518/10.
XX
XX
XX Oligonucleotide bioreversible phosphate esters used as, e.g. research
PT agents.
XX
XX
XX Example 5; Page 35; 61pp; English.
PS
XX
XX The present invention describes oligonucleotides containing bioreversible
CC phosphate ester groups and their mimetics. The oligonucleotides are of
CC value in therapeutics, diagnostics, and as research reagents. The
CC compound from the present invention may be used in control of hereditary,
CC metabolic, and/or cellular processes in any organism utilising DNA-RNA
CC transcription and/or RNA-protein translation. These organisms include
CC prokaryotic and eukaryotic unicellular and multicellular organisms;
CC including bacteria, yeasts, protozoa, algae, and all plants and higher
CC animal forms, including warm blooded animals, particularly humans; also
CC organalle sub-cellular translation and transcription processes. The new
CC synthetic process provides pro-oligonucleotides, i.e., oligonucleotides
CC blocked at phosphate groups by bioreversible groups which can be cleaved
CC by intracellular and intercellular enzymes to generate an active
CC oligonucleotide, as for produgs and drugs. By careful selection of
CC protecting groups, deprotection of nucleobases and partial deprotection
CC of phosphate linkages can be achieved in the reaction sequence. Suggested
CC specific groups include S-divaloylmercaptoethyl (SPME) and
CC cyanoethylcarboxyl (CEOC) groups. Spacer molecules include diglycolyl
CC (COCH 2OCH 2CO) and its analogue with a catechol bisresidue replacing the
CC oxygen atom (1,2-phenylenedioxy-diacetic acid). The present sequence
CC represents a phosphorothioate oligonucleotide used in the exemplification
CC of the present invention
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
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Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGATGTTGGCGG 245
Db 20 GAGAGGGGAGAGTGCTGGGG 1

RESULT 1786
AAA60155/c
ID AAA60155 standard; DNA; 20 BP.
XX
XX AAA60155;
AC
XX 17-OCT-2000 (first entry)
DT
XX
XX Human PPARbeta gene reverse PCR primer.
DE
XX
KM Peroxisome proliferator activated receptor; angiogenesis inhibition;
KW neovascularisation; tumour growth; metastasis; rheumatoid arthritis;
KW psoriasis; atherosclerosis; diabetes; retinopathy; PPAR; Human;
KW retrolental fibroplasia; age-related macular degeneration;
KW neovascular glaucoma; hemangioma; thyroid hyperplasia; Grave's disease;
KW inflammatory; transplantation; transcription factor; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX MO200030628-A2.
XX
XX 02-JUN-2000.
PD
XX
XX 18-NOV-1999; 99WO-US027612.
XX
XX 20-NOV-1998; 98US-0109328P.
XX
XX 20-JAN-1999; 99US-0116530P.
XX
XX (GETH ) GENENTECH INC.
XX
XX Gerritsen ME, Xin XE;
XX
XX WPI; 2000-411807/35.
XX
XX
XX Inhibiting angiogenesis comprises administration of PPAR gamma ligands
PT for treating tumors, neovascularization and rheumatoid arthritis.
XX
XX
XX Example 5; Page 31; 52pp; English.
PS
XX
XX Peroxisome proliferators are agents that induce peroxisomal
CC proliferation. Peroxisome proliferator-activated receptors (PPARs) are
CC members of the steroid receptor superfamily, and are ligand-activated
CC transcription factors. There are three mammalian subtypes of PPAR, alpha,
CC beta (also known as delta) and gamma. The present invention relates to
CC inhibiting angiogenesis by contacting PPAR gamma with a PPAR gamma
CC ligand. This method may be used to treat tumors, and diseases
CC characterised by excessive neovascularisation e.g. rheumatoid arthritis,
CC psoriasis, atherosclerosis, diabetes, retinopathy, retrolental
CC fibroplasia, neovascular glaucoma, age-related macular degeneration,
CC hemangiomas, thyroid hyperplasias, Grave's disease, tissue
CC transplantation, chronic inflammation, lung inflammation, endometriosis
CC and obesity. The present sequence is a PCR primer for human PPARbeta
CC gene. The resulting PCR product was used in the analysis of PPARbeta
CC activity
XX
XX Sequence 20 BP; 1 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

```

RESULT 1787
ID   AAA59793 standard; DNA; 20 BP.
XX   AAA59793;
XX   AAA59793;
XX   06-OCT-2000 (first entry)
XX   Primer for p38 nucleotide sequence amplification.
DE   Primer for p38 nucleotide sequence amplification.
XX   Endocrine disruptor; dioxins; organic halocarbon; phenol; agrochemical;
XX   phthalate esters; aromatic hydrocarbon; organotin compound; oestrogen;
XX   mylex; tocaphene; aldicarb; kepones; kinase signal transduction;
XX   nuclear receptor transcriptional coupling; gonad differentiation;
XX   intermediate filament marker; cell cycle; growth; regulation; oncogene;
XX   tumour suppressor; apoptosis; DNA damage; response; cell adhesion;
XX   motility; angiogenesis regulation; invasion regulation; growth factor;
XX   cytokine; primer; ss.
XX   Synthetic.
XX   WO200026404-A1.
XX   11-MAY-2000.
XX   28-OCT-1999; 99WO-JP005964.
XX   30-OCT-1998; 98JP-00310285.
XX   (TAKI ) TAKARA SHUZO CO LTD.
XX   Kondo A, Sagawa H, Mineno J, Kimizuka F, Kato I;
XX   WPI; 2000-365642/31.
XX   MRNA from cells exposed to an endocrine disruptor is hybridized with a
XX   DNA array of gene fragments for detection of genes whose expression is
XX   altered by the endocrine disruptor.
XX   Example 3; Page 63; 81pp; Japanese.
XX   A method for detecting genes whose expression is altered by an endocrine
XX   disruptor is new and comprises isolation of mRNA from cells, tissue or
XX   organism which have come into contact with the endocrine disruptor, and
XX   hybridising it with a DNA array containing immobilized gene fragments
XX   from genes which may be affected by the endocrine disruptor. The results
XX   of the hybridisation are then compared with a comparison sample to
XX   establish which genes have altered expression. The method is used to
XX   detect genes whose expression is altered by endocrine disruptors such as
XX   dioxins, organic halocarbons, phenols, phthalate esters, aromatic
XX   hydrocarbons, agrochemicals, organotin compounds, oestrogens, mylex,
XX   tocaphene, aldicarb and kepones. The types of genes whose expression may
XX   be altered by these disruptors include those involved in nuclear receptor
XX   transcriptional coupling, kinase type signal transduction, gonad
XX   differentiation, receptor type kinases, intermediate filament markers,
XX   cell cycle and growth regulation, oncogenes and tumour suppression,
XX   apoptosis, DNA damage response, repair and recombination, receptors, cell
XX   fate and development regulators, cell adhesion, motility and invasion,
XX   angiogenesis regulation, invasion regulation, cell-cell interaction, Rho
XX   family small GTPase regulation and growth factors and cytokines.
XX   Sequences AAA59772-A59833 represent primers used to amplify the
XX   nucleotide sequences of genes which may be affected by an endocrine
XX   disruptor
XX   Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX   Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX   Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX   Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX   1236 ACACTTCATCTTCGATATCT 1255
XX   1 AAAGTTCATCTTCGGCATCT 20

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RESULT 1788
ID   AA248795/c
XX   AA248795 standard; cDNA; 20 BP.
XX   AA248795;
XX   AA248795;
XX   21-MAR-2000 (first entry)
XX   PCR primer for mouse beta coding sequence.
DE   PCR primer for mouse beta coding sequence.
XX   MTS; human; polymorphism detection; cancer predisposition; astrocytoma;
XX   Multiple Tumour Suppressor gene; melanoma; leukaemia; glioblastoma;
XX   lymphoma; glioma; Hodgkin's lymphoma; chronic lymphocytic leukaemia;
XX   therapy; MTS1beta; PCR primer; ss.
XX   Homo sapiens.
XX   US5989815-A.
XX   23-NOV-1999.
XX   29-APR-1997; 97US-00848251.
XX   18-MAR-1994; 94US-00214582.
XX   18-MAR-1994; 94US-00215086.
XX   18-MAR-1994; 94US-00215087.
XX   14-APR-1994; 94US-00227369.
XX   01-JUN-1994; 94US-00251938.
XX   17-MAR-1995; 95WO-US0003537.
XX   07-JUN-1995; 95US-00474083.
XX   (UTAH ) UNIV UTAH RES FOUND.
XX   (MYRI ) MYRIAD GENETICS INC.
XX   Skolnick MH, Cannon-Albright LA, Kamb A;
XX   WPI; 2000-070785/06.
XX   Diagnosing a polymorphism associated with a predisposition for cancer.
XX   Example 12; Col 50; 74pp; English.
XX   This sequence is a PCR primer for DNA encoding mouse beta, protein which
XX   is homologous to the human MTS1beta protein. The invention relates to a
XX   method for diagnosing a polymorphism associated with a predisposition to
XX   cancer by detecting a germ-line alteration of a wild-type Multiple Tumour
XX   Suppressor (MTS) gene or its expression products in a human sample. The
XX   method comprises detecting a germ-line alteration of a wild-type MTS gene
XX   or its expression products in a human sample, the alteration indicating a
XX   predisposition to at least one of the cancers. The cancer is selected
XX   from melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioma,
XX   Hodgkin's lymphoma, chronic lymphocytic leukaemia (CLL), and cancers of
XX   the pancreas, breast, thyroid, ovary, uterus, testis, kidney, stomach and
XX   rectum. The method may be used as the basis for developing very important
XX   diagnostic tests capable of predicting the predisposition to cancer. The
XX   MTS gene is involved in the progression of multiple tumour types and may
XX   provide means for a general anti-cancer therapy by virtue of its ability
XX   to suppress tumour growth
XX   Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
XX   Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX   Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX   Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX   505 GAGGGCTACTCTGAGAGCT 524
XX   20 GAAGCTCTCTGACACGCT 1

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RESULT 1789



```
AAZ39994/C
ID AAZ39994 standard; DNA; 20 BP.
XX
AC AAZ39994;
XX
DT 11-FEB-2000 (first entry)
XX
DE PCR primer for human MTS1E1beta 1 coding sequence.
XX
KW Multiple tumour suppressor; MTS2; human; diagnosis; Hodgkin's lymphoma;
KW cancer predisposition; melanoma; leukaemia; lymphoma; glioma; MTS1E1beta;
KW PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5994095-A.
XX
PD 30-NOV-1999.
XX
PF 07-JUN-1995; 95US-00486047.
XX
PR 18-MAR-1994; 94US-00214582.
PR 18-MAR-1994; 94US-00215086.
PR 18-MAR-1994; 94US-00215087.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
PR 17-MAR-1995; 95WO-US003316.
XX
PA (MYRI-) MYRIAD GENETICS INC.
XX
PI Kamb A;
XX
DR WPI; 2000-038259/03.
XX
PT Multiple tumor suppressor cDNA, useful for diagnosing or determining a
PT predisposition to cancer.
XX
PS Example 12; Col 50; 72pp; English.
XX
CC This sequence represents a PCR primer for the human multiple tumour
CC suppressor 1B1beta (MTS1E1beta) coding sequence. The invention relates to
CC the human MTS2 DNA and protein sequences. The DNA sequences are useful
CC for diagnosing or determining a predisposition to cancers e.g. melanoma,
CC leukaemia, lymphoma, glioma, Hodgkin's lymphoma and cancers of the
CC pancreas, breast, thyroid, ovary, kidney, uterus and stomach
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 505 GAGGGCTACCTGGAGAGCT 524
Db |||||||
20 GAAAGCTTCTCGACACGCT 1
XX
RESULT 1790
ID AAZ98298 standard; DNA; 20 BP.
XX
AC AAZ98298;
XX
DT 13-JUN-2000 (first entry)
XX
DE Plasmodium DBL family conserved motif isolating primer UNIBPP5A.
XX
KW DBL gene; Duffy-binding like gene; ebl-1; Duffy Antigen Binding Protein;
KW DABP; Sialic Acid Binding Protein; SAbP; malaria; vaccine; immunisation;
KW protozoa; eba-175; PCR primer; ss.
XX
OS Plasmodium sp.
```

```
XX
PN US5993827-A.
XX
PD 30-NOV-1999.
XX
PF 07-JUN-1995; 95US-00487826.
XX
PR 10-SEP-1993; 93US-00119677.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Sim XL, Chitnis C, Peterson DS, Su X, Wellems TE, Miller LH;
XX
DR WPI; 2000-194198/17.
XX
PT Isolated protein binding domains from Plasmodium vivax and Plasmodium
PT falciparum erythrocyte binding proteins useful for vaccinating against
PT malaria.
XX
PS Example; Fig 3; 93pp; English.
XX
CC The invention relates to ebl-1 polypeptides that are encoded by the DBL
CC (Duffy-binding like) gene family. The ebl-1 proteins are substantially
CC identical to the Duffy Antigen Binding Protein (DABP) and Sialic Acid
CC Binding Protein (SABP), which are soluble proteins that appear in the
CC culture supernatant after erythrocytes infected with malaria release
CC merozoites. Immunochemical studies indicate that DABP and SABP are the
CC respective ligands for Plasmodium vivax and Plasmodium falciparum Duffy
CC and sialic acid receptors on erythrocytes. The ebl-1 polypeptides may be
CC used to vaccinate against malaria, especially caused by P. falciparum.
CC Immunization with the polypeptide provides effective protection against
CC malaria. Sequences AAZ98297-304 represent primers used for isolating
CC sequences encoding the conserved motifs of the DBL family
XX
SQ Sequence 20 BP; 2 A; 4 C; 5 G; 2 T; 0 U; 7 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 55.6%; Pred. No. 1.1e+03;
Matches 10; Conservative 7; Mismatches 1; Indels 0; Gaps 0;
QY 1630 CCCAGCAGCAGCGGCTG 1647
Db ||:::|::|::|:
1 CCSMGSMGSCAGCAGGYS 18
XX
RESULT 1791
ID AAZ48638 standard; DNA; 20 BP.
XX
AC AAZ48638;
XX
DT 07-MAR-2000 (first entry)
XX
DE ICAM-1 antisense inhibitor, ISIS-1939.
XX
KW Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme;
KW expression modulator; cellular adhesion protein; malignant melanoma;
KW cellular proliferation modification; toxic epidermal necrolysis;
KW psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma;
KW pulmonary fibrosis; Lyme disease; infection; therapy; ICAM-1; ss.
XX
OS Synthetic.
XX
PN WO960167-A1.
XX
PD 25-NOV-1999.
XX
PF 20-MAY-1999; 99WO-US011142.
XX
PR 21-MAY-1998; 98US-00082336.
XX
PA (ISIS-) ISIS PHARM INC.
```

```
PI Mehta R, Hardee GE, Cook PD, Ecker DJ, Tsai YJ, Templin MV,
XX
XX WPI: 2000-062467/05.
DR
XX New oligonucleotide compositions for topical delivery, used for the
PT delivery of bioactive agents for, e.g. modulating expression of a
PT cellular adhesion protein.
XX
XX Example 1: Page 47; 94pp; English.
PS
XX This sequence represents an antisense inhibitor of ICAM-1. The invention
XX relates to a pharmaceutical composition comprising an oligonucleotide (ON)
CC added with a topical delivery agent. The compositions can be used for
CC the delivery of a ribozyme, an external guide sequence, an antisense ON,
CC an antisense peptide nucleic acid, an aptamer or a molecular decoy. The
CC ONs can be used to modulate expression of a cellular adhesion protein or
CC to modulate a rate of cellular proliferation. The compositions can also be
CC used to treat psoriasis. They can also be used to treat e.g. lichen
CC planus, toxic epidermal necrolysis, erythema multiforme, basal cell
CC carcinoma, squamous cell carcinoma, malignant melanoma, Paget's disease,
CC Kaposi's sarcoma, pulmonary fibrosis, Lyme disease and viral, fungal and
CC bacterial infections of the skin. They can be used to treat humans and
CC primates, avians including chickens and turkeys, domestic households,
CC sport or farm animals including rats, mice, rabbits and guinea pigs,
CC fish, reptiles and zoo animals. The compositions and methods may also be
CC used to examine the function of various proteins and genes in vitro in
CC cultured or preserved dermal tissues and in animals
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY
XX 226 GAGAGTGTGTGTGTGTGTGCGG 245
DB 20 GAGAGGCGAGAGTGTGTGTGCGG 1
RESULT 1792
AAC61834/C
ID AAC61834 standard; DNA; 20 BP.
XX
XX AAA93378;
AC
XX 12-SEP-2000 (first entry)
DT
XX Mouse P16 PCR primer SEQ ID NO:29.
DE
XX Human; multiple tumour suppressor; MTS; somatic mutation; cancer;
KW diagnosis; germ line mutation; gene therapy; cytostatic; melanoma;
KW leukaemia; astrocytoma; glioblastoma; lymphoma; glioma;
KW Hodgkin's lymphoma; PCR primer; ss.
XX
XX Mus sp.
OS
XX US6060301-A.
PN
XX 09-MAY-2000.
PD
XX 14-JUL-1998; 98US-00115252.
PF
XX 18-MAR-1994; 94US-00214582.
PR 18-MAR-1994; 94US-00215086.
PR 18-MAR-1994; 94US-00215087.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
PR 17-MAR-1995; 95MO-US003316.
PR 07-JUN-1995; 95US-00480810.
PR 08-DEC-1997; 97US-00986147.
XX
XX (MYRI -) MYRIAD GENETICS INC.
XX
```

```
PI Kamb A;
XX
XX WPI: 2000-349676/30.
DR
XX New vector useful for gene therapy of cancer associated with mutation in
PT tumor suppressor gene, comprises DNA sequence of multiple tumor
PT suppressor gene.
XX
XX Example 12: Col 51; 71pp; English.
PS
XX The present invention describes a vector (1) comprising an isolated DNA
XX sequence of a multiple tumour suppressor (MTS) gene having a
CC polynucleotide sequence of the human MTS1B-beta. (1) is useful for
CC introducing wild-type MTS function to a cancerous or pre-cancerous cell
CC which carries diminished or mutant MTS alleles for suppressing neoplastic
CC growth of the recipient cells. (1) is also useful for increasing the
CC level of expression of MTS gene even in tumour cells in which the mutant
CC gene is expressed at a normal level but the gene product is not fully
CC functional. A host cell transformed with (1) is useful as a model system
CC to study cancer remission and drug treatment which promotes such
CC remission. The present invention relates to somatic mutations and germ
CC line mutations in the MTS gene and their use in the diagnosis and
CC prognosis of human cancer e.g. melanoma, leukaemia, astrocytoma,
CC glioblastoma, lymphoma, glioma, Hodgkin's lymphoma, and cancers of the
CC pancreas, breast, thyroid, ovary, uterus, testis, kidney, stomach and
CC rectum. The present sequence represents a PCR primer used in an example
CC from the present invention
XX
XX Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY
XX 505 GAGGCTTACCTGAGACACT 524
DB 20 GAGGCTTCTGACACGCT 1
RESULT 1793
AAC61834
ID AAC61834 standard; DNA; 20 BP.
XX
XX AAC61834;
AC
XX 06-MAR-2001 (first entry)
DT
XX Antisense oligonucleotide directed against human Fas ligand gene.
DE
XX Human; Fas; Apo-1; antisense compound; Fas ligand; Fas-1; hepatitis;
KW Fas associated protein 1; protein tyrosine phosphatase; cancer;
KW autoimmune disease; inflammatory disease; lymphoma; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX misc_feature 1..20
XX modified_base 1..5
XX modified_base 16..20
XX modified_base 16..20
XX /tag= a
XX /note= "2'-methoxyethoxy residues"
XX /tag= c
XX /note= "2'-methoxyethoxy residues"
XX
XX WO200061150-A1.
XX 19-OCT-2000.
XX 10-APR-2000; 2000MO-US009540.
XX
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PR 12-APR-1999; 99US-00290640.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Dean NM, Marcusson EG;  
XX  
XX WPI: 2000-628395/60.  
XX  
XX Antisense oligonucleotides for treating hepatitis and colon, liver or  
XX lung cancer are inhibitors of Fas, Fas ligand or Fas associated protein 1  
XX (Fap-1) expression.  
XX  
XX Example 3; Page 49; 116pp; English.  
XX  
XX AA61821-39 represent antisense oligonucleotides which are directed  
XX against nucleic acids encoding human Fas ligand. The specification  
XX describes antisense compounds which are targeted to the 5'-untranslated  
XX region, translational start site, translational termination region or 3'-  
XX untranslated region of nucleic acid molecules encoding Fas, Fas ligand  
XX (FasL), or Fap-1 (Fas associated protein 1, protein tyrosine  
XX phosphatase). The antisense compounds are used to inhibit the expression  
XX of Fas, FasL or Fap-1 in cells or tissues. They are used to treat  
XX autoimmune or inflammatory diseases such as hepatitis. They can also be  
XX used to treat cancer, especially colon, liver or lung cancer or lymphoma  
XX  
SQ Sequence 20 BP; 3 A; 10 C; 3 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
Qy 1659 CACCCCTCACAGGCGAGCCC 1678  
Db 1 CCTCTTCACATGCGAGCCC 20  
  
RESULT 1794  
AA277261/C  
ID AA277261 standard; DNA; 20 BP.  
AC  
XX AA277261;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
XX Human biallelic marker downstream amplification primer SEQ ID NO:11617.  
XX  
XX Human genome; biallelic marker; high density disequilibrium map;  
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;  
XX haplotyping; hybridisation; identification; characterisation;  
XX amplification; single nucleotide polymorphism; SNP; PCR primer;  
XX diagnosis; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO954500-A2.  
XX  
XX 28-OCT-1999.  
XX  
XX 21-APR-1999; 99WO-IB000822.  
XX  
XX 21-APR-1998; 98US-0082614P.  
XX 23-NOV-1998; 98US-0109732P.  
XX  
XX (GEST ) GENSET.  
XX  
XX Cohen D, Blumenfeld M, Chumakov I;  
XX  
XX WPI: 2000-013267/01.  
XX  
XX Novel biallelic markers used to construct a high density disequilibrium  
XX map of the human genome.  
XX  
PS Claim 9; Page 2707; 2745pp; English.

XX  
XX AA265654 to AA269578 represent human biallelic markers from the present  
XX invention, which contain a polymorphic base at position 24 of their  
XX nucleotide sequences. AA269579 to AA277440 represent amplification  
XX primers for the biallelic markers. The biallelic markers of the invention  
XX have a variety of uses: they can be used for high density mapping of the  
XX human genome, and in complex association studies and haplotyping studies  
XX which are useful in determining the genetic basis for disease states.  
XX Composition and methods of the invention can also be useful for the  
XX identification of the targets for the development of pharmaceutical  
XX agents and diagnostic methods, as well as the characterisation of the  
XX differential efficacious responses to and side effects from  
XX pharmaceutical agents acting on a disease as well as other treatment.  
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
XX 3367, are not actually given a sequence in the Sequence Listing from the  
XX present invention  
XX  
SQ Sequence 20 BP; 9 A; 0 C; 9 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
Qy 1237 CACTTCATCTTCGTATCTT 1256  
Db 20 CTCTCCTCTTCATATCTT 1  
  
RESULT 1795  
AA514488  
ID AA514488 standard; DNA; 20 BP.  
AC  
XX AA514488;  
XX  
DT 06-JUN-2002 (first entry)  
XX  
XX Primer #13 in invention relating to von Willebrand factor.  
XX  
XX Von Willebrand factor; primer; ss.  
XX  
XX Unidentified.  
XX  
XX KR99066382-A.  
XX  
XX 16-AUG-1999.  
XX  
XX 24-JAN-1998; 98KR-00002265.  
XX  
XX 24-JAN-1998; 98KR-00002265.  
XX  
XX (GREC ) KOREA GREEN CROSS CORP.  
XX  
XX  
XX Kim HC, Kim JS, Byun TH, Lee JS, Oh HG, Lee JM, Kim BJ;  
XX  
XX WPI: 2000-547436/50.  
XX  
XX Method for purifying factor VIII using chimera antibody to von Willebrand  
XX factor.  
XX  
XX Disclosure; Page 4; 12pp; Korean.  
XX  
XX The present invention relates to von Willebrand factor. The present  
XX sequence represents a primer used in the methods of the present invention  
XX  
SQ Sequence 20 BP; 5 A; 3 C; 5 G; 3 T; 0 U; 4 Other;  
  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 65.0%; Pred. No. 1.1e+03;  
Matches 13; Conservative 4; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 140 AGATCAACGCGAGCGTCA 159  
Db 1 AGGISHMARTCGAGSAGTCA 20

```

RESULT 1796
ID AAA09667/C
XX AAA09667 standard; DNA; 20 BP.
AC
XX
XX AAA09667;
DE
DT 30-JAN-2001 (first entry)
XX
XX Human SHP-1 antisense oligonucleotide SEQ ID 31.
DE
XX Human; SHP-1; Src homology region 2-domain phosphatase; phosphorothioate;
XX cytosolic tyrosine phosphatase; antisense oligonucleotide; cancer;
XX leukaemia; inflammation; infection; ss.
XX
XX Homo sapiens.
OS
XX US6121047-A.
XX
XX 19-SEP-2000.
XX
XX 21-JUL-1999; 99US-00358685.
XX
XX 21-JUL-1999; 99US-00358685.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowseert LM;
XX
XX WPI; 2000-593714/56.
XX
XX Novel antisense oligonucleotides for modulating the expression of human
XX SHP-1, especially for treating a disease or condition associated with SHP
XX -1 expression, e.g. cancer.
XX
XX Claim 3; Col 41; 33pp; English.
XX
XX The invention relates to antisense oligonucleotides which modulate the
XX expression of human SHP-1 (Src homology region 2-domain phosphatase) a
XX cytosolic tyrosine phosphatase. The invention includes antisense
XX molecules AAA09644-A09683 which have modified phosphorothioate
XX internucleoside linkages which target various regions of the SHP-1 gene.
XX The oligonucleotides inhibit the expression of human SHP-1 in cells or
XX tissues, and may be used to treat diseases or conditions associated with
XX SHP-1 expression e.g. cancers, specifically leukaemia
XX
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 210 GCAGATAGGCGCTGATGAGA 229
DB ||| ||||| |||||
20 GCTGCTAGGCGCTGATGAGA 1
XX
RESULT 1797
ID AAA63936/C
XX AAA63936 standard; DNA; 20 BP.
AC
XX AAA63936;
XX
XX 04-DEC-2000 (first entry)
XX
XX PCR primer for murine cDNA encoding an AGP-3 polypeptide.
XX
XX AGP-3; tumour necrosis factor ligand; TNF ligand; Crohn's disease;
XX type II transmembrane protein; B cell stimulatory factor;
XX inflammatory disorder; immune disorder; rheumatoid arthritis;
XX lupus and graft versus host disease; PCR primer; ss.
XX

```

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OS Mus sp.
XX
XX MO200047740-A2.
XX
XX 17-AUG-2000.
XX
XX 11-FEB-2000; 2000WO-US003653.
XX
XX 12-FEB-1999; 99US-011906P.
XX
XX 18-NOV-1999; 99US-0166271P.
XX
XX (AMGE-) AMGEN INC.
XX
XX Boyle WJ, Hsu H;
XX
XX WPI; 2000-558217/51.
XX
XX Novel polypeptides comprising tumor necrosis factor ligand family
XX proteins, useful for treating inflammatory and immune disorders, e.g.
XX rheumatoid arthritis.
XX
XX Disclosure; Page 36; 71pp; English.
XX
XX PCR primers AAA63936-37 were used to amplify cDNA encoding a murine AGP-3
XX polypeptide. AGP-3 is a tumour necrosis factor (TNF) ligand family
XX member. AGP-3 is a type II transmembrane protein, and is a potent B cell
XX stimulatory factor. Expression of AGP-3 correlates to increases in the
XX number of B cells and immunoglobulins produced. AGP-3 proteins,
XX antibodies, and nucleic acids may be used to treat inflammatory and
XX immune disorders, e.g. rheumatoid arthritis, Crohn's disease, lupus and
XX graft versus host disease. The nucleic acids may be used to regulate the
XX expression of an AGP-3 related protein. The AGP-3 proteins, antibodies
XX and nucleic acids are also useful for the detection of AGP-3 agonists,
XX antagonists and characterizing interactions with AGP-3 related proteins
XX
XX Sequence 20 BP; 6 A; 7 C; 7 G; 0 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 916 CTGTTCCGTGCTCCAGCTGCT 935
DB ||||| ||||| |||||
20 CTGTTCCGTGCTGCGCGGCT 1
XX
RESULT 1798
ID AA249337/C
XX AA249337 standard; DNA; 20 BP.
AC
XX AA249337;
XX
XX 14-MAR-2000 (first entry)
XX
XX ICAM-1 targeted phosphorothioate oligonucleotide ISIS 1939.
XX
XX ICAM-1; cellular adhesion; expression; modulation; antisense;
XX non-parenteral; delivery; uptake; administration; emulsion;
XX ulcerative colitis; Crohn's disease; inflammatory bowel disease;
XX cellular proliferation; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /'tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages"
XX
XX MO9960012-A1.
XX
XX 25-NOV-1999.
XX

```

XX	Pf	20-MAY-1999;	99WO-US011394.
XX	Pr	21-MAY-1998;	98US-00082624.
XX	Pa	(ISIS-) ISIS PHARM INC.	
XX	Pt	Teng C, Cook PD, Tillman L, Hardee GE, Ecker DU, Manoharan M;	
XX	Dt	WPI; 2000-072428/06.	
XX	Pt	New oligonucleotide compositions used for the non-parenteral delivery of	
XX	Pt	e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular	
XX	Pt	decays, external guide sequences or aptamers.	
XX	Ps	Claim 80; Page 37; 13pp; English.	
XX	Cc	Sequences AAZ49336-249343 and AAZ49390 represent antisense	
XX	Cc	oligonucleotides designed to modulate cellular adhesion. The invention	
XX	Cc	relates to new compositions for the non-parenteral delivery of	
XX	Cc	oligonucleotides comprising at least one oligonucleotide in an emulsion.	
XX	Cc	Oligonucleotides delivered via the compositions of the invention can be	
XX	Cc	used to modulate expression of a cellular adhesion protein, modulate a	
XX	Cc	rate of cellular proliferation, or have biological activity against	
XX	Cc	eukaryotic pathogens or retroviruses. They can be used for treating	
XX	Cc	conditions including e.g., ulcerative colitis, Crohn's disease,	
XX	Cc	inflammatory bowel disease or undue cellular proliferation. The	
XX	Cc	compositions can enhance the local and systemic uptake and delivery of	
XX	Cc	nucleic acids via non-parenteral routes of administration (e.g., via the	
XX	Cc	alimentary canal, skin, eyes, pulmonary tract, urethra or vagina)	
XX	Sq	Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;	
Qy	Query Match	0.8%; Score 13.6; DB 1; Length 20;	
Db	Best Local Similarity	80.0%; Pred. No. 1.1e+03;	
Matches	16; Conservative	0; Mismatches 4; Indels 0; Gaps 0;	
Qy	226 GAGAGTGGTGCTGTCGCCG 245		
Db	20 GAGAGCGGAAGTGTGCGGG 1		
RESULT 1799			
ID	AAZ44889/C		
AC	AAZ44889 standard; DNA; 20 BP.		
XX	AAZ44889;		
DT	27-APR-2000 (first entry)		
DE	Human K-ras PCR primer R6.		
XX	Detection; primer extension; point mutation; pathogenicity; therapy;		
XX	cancer; genetic disease; K-ras; human; PCR primer; mutation; ss.		
XX	Homo sapiens.		
XX	US6013431-A.		
XX	11-JAN-2000.		
XX	02-DEC-1993;	93US-00162376.	
XX	16-FEB-1990;	90US-00482005.	
XX	15-FEB-1991;	91US-00656575.	
XX	(MOLE-) MOLECULAR TOOL INC.		
XX	Syvänen A, Soederlund HE;		
XX	WPI; 2000-146544/13.		
XX	Identifying the nucleotide at specific position in a target sequence for		

```

PT detecting disease-related point mutations involves extending a primer
PR that binds adjacent to the specific site to incorporate a labeled
XX deoxynucleotide.
PS Example 7; Col 17-18; 14pp; English.
XX
XX This invention describes a novel method for determining the identity of a
CC specific nucleotide at one or more defined sites in a target nucleic acid
CC polymer involves formation of a detectable primer extension product if
CC the specific nucleotide is present at the defined site in the target
CC nucleic acid. The method is specifically used to detect point mutations
CC which are associated with altered pathogenicity or resistance to therapy
CC in a microorganism, particularly human immune deficiency virus or with
CC cancer or a genetic disease (or susceptibility to it) in humans, but more
CC generally can be used to detect mutations in RNA or DNA from animals,
CC plants or microorganisms. By selecting a primer that binds adjacent to
CC the specific site, variations at this site can be detected following
CC incorporation of only a single dNTP. The method requires only a few,
CC simple manipulations, making it suitable for routine use, and allows
CC quantification of the proportion of mutated cells in a mixed population,
CC down to 0.5% of this population. The method is easily automated. This
CC sequence represents a PCR primer used to detect a mutation in the human K
XX -ras gene
XX
XX Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
SQ
OY 1311 GACATACCACTATCCCCAAGT 1330
DB 20 GAGCTCCACACTCCACCAAGT 1
RESULT 1800
AAZ89211/C
ID AAZ89211 standard; DNA; 20 BP.
XX
XX AAZ89211;
XX
XX 09-JUN-2000 (first entry)
DE Human glyceralddehyde-3-phosphate dehydrogenase forward PCR primer.
XX
XX Human; expression profile; Three Prime End Amplification; TPEA;
XX glyceralddehyde-3-phosphate dehydrogenase; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200006208-A2.
XX
XX 17-FEB-2000.
XX
XX 05-AUG-1999; 99WO-GB002579.
XX
XX 05-AUG-1998; 98GB-00017055.
XX
XX (MEDICAL RES COUNCIL.
XX
XX Freeman TC, Richardson PJ, Dixon AK;
XX
XX WPI; 2000-224033/19.
XX
XX Reverse transcription of mRNA species used for expression profiling of
XX single cells by employing a first healed primer to provide first strand
XX cDNA species and then a second healed primer population to generate
XX second strand cDNA.
XX
XX Example 1; Page 29; 50pp; English.
XX
XX This invention describes a novel process (M1) of reverse transcribing
XX mRNA species present in a sample from an organism by: (a) reverse

```

transcribing the mRNA species using a first heeled primer, to provide a first strand cDNA species; and (b) synthesizing second cDNA species using a second heeled primer population, the nucleotide sequences of the non-heeled portions of the second heeled primers being such that the reverse transcribed first strand cDNA species are capable of hybridizing to at least one second primer. The processes can be used for expression profiling of single cells. The polynucleotide comprising an oligo d(T) sequence and a heeled sequence 5' can be used for the reverse transcription of mRNA species in a sample. The polynucleotide primer population of claim (4) can be used for the synthesis of second strand cDNA from a population of first strand cDNA species. Single cell cDNA libraries can be made for subsequent detailed analysis of gene expression and the discovery of novel genes. Small samples can be used and allow the utilization of the large amount of sequence data available for further understanding of disease processes and the cellular physiology of complex tissues. The invention provides a rapid, robust and reproducible procedure called Three Prime End Amplification (TPEA), optionally with PCR (TPEA-PCR). Prior art methods for the analysis of gene expression within single cells or small tissue samples are limiting. Whilst in situ hybridization techniques provide detailed information about the cellular expression pattern of a gene in intact tissue the technique is laborious and unable to analyze multiple transcripts in a single preparation. The methods presented in the disclosure provide a more straightforward, reproducible and reliable cDNA amplification procedure for small mRNA samples where expression profiling can be conducted. The amplification technique can be carried out in a single tube with a need for only limited manual intervention and large numbers of samples can be analyzed. There is a bias towards more uniform length cDNA molecules ensuring that even relatively low abundance mRNA species are transcribed and optionally amplified at the same level of efficiency as more abundant mRNA species. AA289191-289253 represent the primers described in the method of the invention

Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 621 TAACTGACAACTGGGCG 640  
DB 20 TGAGCTTGACAAAGTGTG 1

RESULT 1801  
AA21186/c  
ID AA21186 standard; DNA; 20 BP.

XX AA21186;

DT 11-OCT-2000 (first entry)

DE Mouse multiple tumour suppressor 1 E1beta p16-specific reverse primer.

XX Variant; human; multiple tumour suppressor; MTS; mutation; melanoma;  
KW cancer; diagnosis; PCR primer; ss.

OS Mus sp.

XX US6037462-A.

PN 14-MAR-2000.

XX 22-JUL-1998; 98US-00120130.

XX 18-MAR-1994; 94US-00214582.

XX 18-MAR-1994; 94US-00215086.

XX 14-APR-1994; 94US-00227369.

XX 01-JUN-1994; 94US-00251938.

XX 17-MAR-1995; 95WO-US003316.

XX 07-JUN-1995; 95US-00480810.

PA (MYRI-) MYRIAD GENETICS INC.  
XX  
PI Kamb A;  
XX  
DR WPI; 2000-269915/23.  
XX  
PT New mutants of the human multiple tumor suppressor gene, useful as  
PT diagnostic markers of cancer, contain specific base alterations or  
PT deletions.

XX Example 12; Col 50; 72pp; English.

PS The invention relates to variants (AA21196-A11206) of the human multiple  
XX tumour suppressor 1 (MTS1) gene (AA21165). The variants have the  
XX following changes relative to this sequence: A at any of positions 265,  
CC 442, 330 and 329; T at any of positions 172, 238, 341 and 148 and  
CC deletions of nucleotides 290-294, 172-179 or 128-129. The variants are  
CC somatic mutations of MTS1, indicative of predisposition to melanoma and  
CC many other cancers, so detecting them is useful for diagnosis, prognosis  
CC and monitoring of cancer (including prenatal analysis). Cells and animals  
CC that express the variants are useful as model systems for identifying  
CC potential anticancer agents. This sequence represents a primer used to  
CC screen for the mouse MTS1 E1beta sequence

Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 505 GAGGCTACTGAGAGACT 524  
DB 20 GAGGCTTCTGACACGCT 1

RESULT 1802  
AA248909/c  
ID AA248909 standard; DNA; 20 BP.

XX AA248909;

DT 29-MAR-2000 (first entry)

DE Human ICAM-1 antisense inhibitor, ISIS #1939.

XX Antisense inhibitor; human; ICAM-1; intercellular adhesion molecule-1;  
KW vascular cell adhesion molecule-1; hyperproliferative disorder; VCAM-1;  
KW endothelial leukocyte adhesion molecule-1; ELAM-1; skin condition;  
KW cancer; viral infection; tumour; diapedesis; graft versus host disease;  
KW arthritis; infection; autoimmune disorder; multiple sclerosis; stroke;  
KW juvenile diabetes mellitus; arthritis; myasthenia gravis; therapy;  
KW pemphigus vulgaris; systemic lupus erythematosus; acute myocarditis;  
KW cardiovascular disorder; dilated cardiomyopathy; ischemic heart disease;  
KW ss.

XX Homo sapiens.

XX WO9961462-A1.

PN 02-DEC-1999.

XX 26-MAY-1999; 99WO-US011548.

XX 27-MAY-1998; 98US-00085759.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Mirabelli CK, Baker BF;

XX WPI; 2000-072600/06.

XX New antisense oligonucleotides, used for treating e.g. inflammatory  
PT conditions, psoriasis, graft rejection, cancers, infections,

```
PT cardiovascular disorders or autoimmune disorders.
XX
XX Example 10; Page 176; 199pp; English.
XX
CC This sequence is an antisense oligonucleotide of the invention. The
CC antisense oligonucleotides are targeted to a nucleic acid encoding a
CC cellular adhesion molecule (CAM) and is capable of modulating the
CC expression of the CAM. They particularly inhibit intercellular adhesion
CC molecule-1 (ICAM-1), vascular cell adhesion molecule-1 (VCAM-1), or
CC endothelial leukocyte adhesion molecule-1 (ELAM-1). The antisense
CC oligonucleotides can be used to modulate CAM activity in mediating
CC cell-cell interactions and subsequent cellular and biological responses,
CC e.g. T cell activation, leukocyte transmigration and inflammation. The
CC antisense sequences can be used for modulating the synthesis of a CAM.
CC They can be used for treating an animal suspected of having or being
CC prone to a disease or condition associated with a CAM. Oligonucleotides
CC targeted to ICAM-1 can be used for treating an inflammatory disease or
CC condition e.g. inflammatory bowel disease such as Crohn's disease,
CC colitis or ulcerative colitis, a condition of the skin, e.g. psoriasis or
CC cytotoxic dermatitis, rheumatoid arthritis, allograft rejection, cancer,
CC pneumonia, multiple sclerosis or a viral infection. The ICAM-1 sequences
CC can also be used for reducing corticosteroid use in a patient or for
CC reducing cyclosporine use in a patient. The oligonucleotides can also be
CC used for detection and diagnosis. They can also be used for treating e.g.
CC hyperproliferative disorders, tumours, diapedesis, graft versus host
CC disease, arthritis, infections, autoimmune disorders, e.g. autoimmune
CC thyroid disorders, autoimmune forms of arthritis, multiple sclerosis,
CC some forms of juvenile diabetes mellitus, myasthenia gravis, pemphigus
CC vulgaris, systemic lupus erythematosus, cardiovascular disorders,
CC myocardial ischaemia/reperfusion injury, dilated cardiomyopathy, acute
CC myocarditis, ischaemic heart disease or stroke
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGTGTGTGTGCGCG 245
DB 20 GAGAGCGGAGAGTGTGTGCGG 1
RESULT 1803
AAC68206
ID AAC68206 standard; DNA; 20 BP.
XX
AC AAC68206;
XX
DT 19-FEB-2001 (first entry)
XX
DE Gene typing PCR primer #1.
XX
KW Human leukocyte antigen; HLA; gene typing; infectious disease;
KW autoimmune disease; inflammation; cancer; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN CA2299675-A1.
XX
PD 12-SEP-2000.
XX
PF 10-MAR-2000; 2000CA-02299675.
XX
PR 12-MAR-1999; 99US-0124113P.
XX
PA (UTMA-) UNIV MANITOBA.
XX
PI Luo M, Brunham RC, Pan Y, Brunham K;
XX
DR WPI; 2000-679930/67.
XX
PT Typing polymorphic genes, useful to assess the association of alleles
```

```
PT with diseases and in disease diagnosis, uses a taxonomy based sequence
PT analysis in which a typing tree based on distinguishing sequences is
PT constructed.
XX
XX Disclosure; Page 64; 125pp; English.
XX
CC The present invention provides a novel method for typing genes,
CC particularly human leukocyte antigen (HLA) coding sequences. The method
CC uses DNA sequences and a taxonomy-based sequence analysis method to
CC assign alleles for HLA-DQA1, HLA-DQB1 and HLA-DRB. These alleles have
CC been linked to diseases such as diabetes, IGA deficiency, multiple
CC sclerosis, cancer, clinical and immunological manifestations of HIV
CC infection, coeliac disease, idiopathic nephrotic syndrome, immune
CC responses to parasite antigens, pemphigus vulgaris, inflammatory bowel
CC disease, rheumatoid arthritis, allergy and other inflammatory diseases
XX
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1427 TCTCGGAGAGATGCCATG 1446
DB 1 TCCCGGAGAGATTTCGTG 20
RESULT 1804
AAC6586
ID AAC6586 standard; DNA; 20 BP.
XX
AC AAC6586;
XX
DT 19-FEB-2001 (first entry)
XX
DE Gene typing PCR primer SEQ ID NO: 6.
XX
KW Human leukocyte antigen; HLA; gene typing; infectious disease;
KW autoimmune disease; inflammation; cancer; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN CA2299675-A1.
XX
PD 12-SEP-2000.
XX
PF 10-MAR-2000; 2000CA-02299675.
XX
PR 12-MAR-1999; 99US-0124113P.
XX
PA (UTMA-) UNIV MANITOBA.
XX
PI Luo M, Brunham RC, Pan Y, Brunham K;
XX
DR WPI; 2000-679930/67.
XX
PT Typing polymorphic genes, useful to assess the association of alleles
PT with diseases and in disease diagnosis, uses a taxonomy based sequence
PT analysis in which a typing tree based on distinguishing sequences is
PT constructed.
XX
XX Claim 9; Page 93; 125pp; English.
XX
CC The present invention provides a novel method for typing genes,
CC particularly human leukocyte antigen (HLA) coding sequences. The method
CC uses DNA sequences and a taxonomy-based sequence analysis method to
CC assign alleles for HLA-DQA1, HLA-DQB1 and HLA-DRB. These alleles have
CC been linked to diseases such as diabetes, IGA deficiency, multiple
CC sclerosis, cancer, clinical and immunological manifestations of HIV
CC infection, coeliac disease, idiopathic nephrotic syndrome, immune
CC responses to parasite antigens, pemphigus vulgaris, inflammatory bowel
CC disease, rheumatoid arthritis, allergy and other inflammatory diseases
XX
```

```
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1427 TCTCCGACAGAGATGCCATG 1446
DB 1 TCCTCCGACAGAGATTTCTGTG 20

RESULT 1805
AAA94747/C
ID AAA94747 standard; DNA; 20 BP.
XX
AC AAA94747;
XX
DT 19-JAN-2001 (first entry)
XX
DE Oligonucleotide #1.
XX
KW VP22; gene therapy; tumour; psoriasis; eczema; skin cancer; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All bases are phosphorothiate deoxynucleotides.
FT Optionally labelled at 3' end with fluorescein or at 5'
FT end with biotin"
XX
XX
XX WO200053722-A2.
XX
XX
XX 14-SEP-2000.
XX
XX
XX 10-MAR-2000; 2000WO-GB000897.
XX
XX
XX 10-MAR-1999; 99GB-00005444.
XX
XX 24-DEC-1999; 99GB-00030499.
XX
XX (PHOG-) PHOGEN LTD.
XX
XX
XX O'hare PFJ, Normand NM;
XX
XX
XX WPI; 2000-594314/56.
XX
XX
XX Aggregated composition suitable for phototherapy or prophylaxis of
XX psoriasis, eczema or skin cancer and for delivering nucleic acids and
XX proteins into cells, comprises transport protein VP22 and an
XX oligonucleotide.
XX
XX
XX Example 1; Page 11; 28pp; English.
XX
XX The present invention relates to an aggregated composition comprising a
XX polypeptide having the transport function of herpesviral transport
XX protein VP22. The aggregates can be useful for delivery of
XX oligonucleotides and proteins into cells. The present sequence is one
XX such oligonucleotide which may be delivered into cells using the method
XX of the present invention. The aggregated composition is useful for
XX preparing a medicament for therapy or prophylaxis of a disease and for
XX delivering molecules to cells in vitro. The aggregates are delivered to
XX target cells such as tumour cells in vivo and are useful for treating
XX psoriasis, eczema or skin cancer
XX
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGTGTGTGTGGCGG 245
```

```
DB 20 GAGAGCGGAGTGTGTGGGCG 1
|||||
RESULT 1806
AAA73499/C
ID AAA73499 standard; DNA; 20 BP.
XX
AC AAA73499;
XX
DT 28-NOV-2000 (first entry)
XX
DE Human c-raf kinase antisense oligonucleotide #11 (ISIS #5149).
XX
XX
XX Human c-raf; protein kinase; antisense oligonucleotide; cancer;
XX signal transduction; hyperplasia; pulmonary fibrosis; angiogenesis;
XX psoriasis; atherosclerosis; smooth muscle cell proliferation; stenosis;
XX restenosis; inflammatory disorder; tissue graft rejection;
XX endotoxin shock; glomerular nephritis; ss.
XX
XX
XX Homo sapiens.
XX
XX
XX US6090626-A.
XX
XX
XX 18-JUL-2000.
XX
XX
XX 28-AUG-1998; 98US-00143214.
XX
XX
XX 31-MAY-1994; 94US-00250856.
XX
XX 31-MAY-1995; 95MO-US007111.
XX
XX 26-NOV-1996; 96US-00756806.
XX
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX
XX Boggs RT, Monia BP;
XX
XX
XX WPI; 2000-531424/48.
XX
XX
XX Antisense oligonucleotides targeted to nucleic acid molecule encoding
XX human raf useful for diagnosis, treatment of raf-associated cell
XX proliferative conditions such as cancer, psoriasis or blood vessel
XX restenosis.
XX
XX
XX Disclosure; Col 9; 31pp; English.
XX
XX
XX c-raf is a serine-threonine-specific protein kinase and is thought to
XX play a fundamental role in signal transduction, and cell proliferation
XX control. The present sequence is an antisense oligonucleotide. This
XX sequence is targeted to human c-raf gene, resulting in c-raf expression
XX inhibition. The present sequence may be useful for treating and raf-
XX associated cell hyperproliferation conditions such as cancer,
XX hyperplasias, pulmonary fibrosis, angiogenesis, psoriasis,
XX atherosclerosis and smooth muscle cell proliferation in blood vessels
XX e.g. stenosis or restenosis following angioplasty. Also, the present
XX sequence may be useful for treating inflammatory disorders such as tissue
XX graft rejection, endotoxin shock and glomerular nephritis
XX
XX
XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1186 ATGGCCACAGGCGGCCCT 1205
DB 20 ATGGCTCCAGGCTTCACCT 1
|||||
RESULT 1807
AAC60947/C
ID AAC60947 standard; DNA; 20 BP.
XX
XX
XX AAC60947;
```



XX 13-FEB-2001 (first entry)  
DT  
XX  
DE Interleukin 1 receptor antagonist short tandem repeat primer SEQ ID NO:7.  
XX  
XX Short tandem repeat; primer: 5NR; susceptibility: HIV; infection; AIDS;  
XX detection; polymorphism; interleukin 10 promoter; IL-10;  
XX chromosome position 2q12; interleukin 1 receptor antagonist; ss.  
XX  
XX Homo sapiens.  
XX  
XX MO200061811-A2.  
XX  
XX 19-OCT-2000.  
XX  
XX 06-APR-2000; 2000MO-US009355.  
XX  
XX 09-APR-1999; 99US-0128521P.  
XX  
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX  
XX Smith MM, Shin HD, O'Brien SJ;  
XX  
XX MPI, 2000-687051/67.  
XX  
XX Predicting susceptibility to HIV infection or progression useful for  
XX selection of therapeutic treatment for persons infected with HIV virus,  
XX comprises detecting polymorphism in human interleukin-10 promoter.  
XX  
XX Example 1; Page 11; 40pp; English.  
XX  
XX The present invention describes a method for predicting susceptibility to  
XX HIV infection or HIV progression in a subject. The method involves  
XX detecting a polymorphism in a human interleukin-10 (IL-10) promoter,  
XX where the presence of the polymorphism indicates susceptibility to HIV  
XX infection or HIV progression. The method provides prognostic information  
XX to persons infected with HIV virus and is useful to help select  
XX treatments (such as administration of IL-10 or gene therapy with IL-10).  
XX The presence of polymorphism is useful as predictor that very aggressive  
XX treatment could substantially eradicate the virus from the infected  
XX person. The method is useful for the generation of normograms or other  
XX predictive algorithms that can be used, in association with allele  
XX status, to prognose probable survival or years to development of AIDS  
XX following HIV seroconversion. It indicates that increased expression of  
XX the IL-10 gene helps to reduce HIV-1 infection and pathogenic progression  
XX and enables a variety of new therapeutic interventions in the treatment  
XX of HIV disease. The present sequence represents a short tandem repeat  
XX (STR) primer which is used in an example from the present invention  
XX  
XX Sequence 20 BP; 4 A; 2 C; 7 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1442 CCATGAACATCCATCTTTC 1461  
DB 20 CCATGCACATCCATCATGATC 1  
RESULT 1808  
AAC83137  
ID AAC83137 standard; DNA; 20 BP.  
XX  
XX AAC83137;  
XX  
XX 23-FEB-2001 (first entry)  
DT  
XX  
XX Cell cycle regulatory gene related oligonucleotide SEQ ID 48.  
DE  
XX  
XX Cell cycle regulation; corn; transgenic plant; cyclin; maize; soybean;  
XX cyclin-dependent kinase; sunflower; sorghum; canola; wheat; alfalfa;  
XX cotton; rice; barley; millet; ss.

XX Zea mays.  
OS  
XX  
XX MO200065040-A2.  
XX  
XX 02-NOV-2000.  
XX  
XX 13-APR-2000; 2000MO-US009975.  
XX  
XX 22-APR-1999; 99US-0130849P.  
XX  
XX (PION-) PIONEER HI-BRED INT INC.  
XX  
XX Helentjaris TG, Habben JE, Sun Y;  
XX  
XX MPI, 2000-687333/67.  
XX  
XX Nucleic acids useful for producing transgenic plants, preferably maize,  
XX with increased cell cycle gene activity, preferably activity of cyclin  
XX and/or cyclin-dependent kinase.  
XX  
XX Disclosure; Page 118; 122pp; English.  
XX  
XX Polynucleotide sequences AAC83101 - AAC83113 encode proteins AAB35794 -  
XX AAB35806 which are involved in regulating the cell cycle. The protein and  
XX DNA sequences have been isolated from Zea mays (corn), and the invention  
XX also includes oligonucleotides AAC83114 - AAC83119 which are related to  
XX the cell cycle polynucleotides. The cell cycle polynucleotide sequences  
XX are useful for producing transgenic plants such as maize, soybean,  
XX sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley and  
XX millet with increased levels of cell cycle gene activity, such as  
XX activity of cyclin and cyclin-dependent kinases. The DNA sequences are  
XX also useful as probes for detecting deficiencies in the level of mRNA in  
XX screening for desired transgenic plants, for detecting mutations in the  
XX gene, for monitoring upregulation of expression or changes in enzyme  
XX activity in screening assays of compounds, for detecting any number of  
XX allelic variants, orthologs or paralogues of the gene, and site-directed  
XX mutagenesis in eukaryotic cells. The DNA sequences are also useful for  
XX recombinant expression of the encoded polypeptides and as immunogens for  
XX preparing and screening antibodies. A transgenic plant comprising an  
XX expression cassette including a cell cycle regulatory gene is useful for  
XX assaying enzyme agonists and antagonists, and as immunogens or antigens  
XX to obtain antibodies. The antibodies are useful in assaying expression  
XX levels of cell cycle regulatory proteins, for identifying and isolating  
XX nucleic acids from expression libraries, for identifying homologues of  
XX polypeptides from other species, and for purification of the proteins  
XX  
XX Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 279 TCCTGGGGGAACCTTGCTCTG 298  
DB 1 TCAAGGGGAAATGTTCTG 20  
RESULT 1809  
AAC79550/c  
ID AAC79550 standard; DNA; 20 BP.  
XX  
XX AAC79550;  
XX  
XX 07-FEB-2001 (first entry)  
DT  
XX  
XX Murine p38beta antisense oligonucleotide SEQ ID 75.  
DE  
XX  
XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;  
XX antiheumatic; antiarthritic; immunosuppressive; cardiac; heart disease;  
XX antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;  
XX phosphorothioate; ss.

```
OS Mus sp.
XX WO200059919-A1.
XX 12-OCT-2000.
XX
XX 04-APR-2000; 2000WO-US008794.
XX
XX 06-APR-1999; 99US-00286904.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monta BP, Gaarde WA, Nero PS, McKay R, Popoff I;
XX WPI; 2000-664982/64.
XX
XX Antisense compound targeted to p38 mitogen activated protein kinase
XX inhibits protein kinase and is useful for diagnosing and treating
XX inflammatory, autoimmune and heart disease.
XX
XX Example 5; Page 54; 90pp; English.
XX
XX This invention relates to antisense compounds 8-30 nucleobases in length
XX targeted to the 5'-untranslated region, translational start site,
XX translational termination region or 3'-untranslated region of a nucleic
XX acid encoding a p38 mitogen activated protein kinase (MAPK), where the
XX antisense oligonucleotides inhibit the expression of MAPK. Sequences
XX AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA
XX sequences. AAC79481 - AAC79500 and AAC79502 - AAC79521 and
XX p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and
XX AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides.
XX Also included in the invention are a p38alpha cDNA sequence AAC79523 and
XX antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.
XX Murine p38beta MAPK cDNA is represented in AAC79537 and antisense
XX oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.
XX The antisense oligonucleotides have antiinflammatory; antiarthritic;
XX immunosuppressive; cardiant and antiinflammatory activity. The antisense
XX oligonucleotides are useful for inhibiting the expression of p38 MAPK in
XX cells or tissues. The oligonucleotides are used for treating an animal
XX with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid
XX arthritis, or heart disease. The oligonucleotides are also useful for
XX inhibiting inflammation or apoptosis
XX
XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1153 GACATGTGGGCTGTGGCTG 1172
DB 20 GACATGTGCTGTGTGCTG 1
XX
XX RESULT 1810
XX AAA97969
XX ID AAA97969 standard; DNA; 20 BP.
XX
XX AAA97969;
XX
XX 15-SEP-2003 (revised)
XX DT 26-JAN-2001 (first entry)
XX
XX B. brevis NRPS gene A domain PCR primer SEQ ID NO: 10.
XX
XX NRPS; non-ribosomal peptide synthetase; adenylation domain; A domain;
XX PCR primer; antibiotic; immunosuppressant; cytostatic; antiviral;
XX antihelminthic; fungicidal; ss.
XX
XX Brevibacillus brevis.
XX
XX OS
XX XX
XX PN WO200052152-A1.
XX XX
```

```
PD 08-SEP-2000.
XX
XX 28-FEB-2000; 2000WO-EP001652.
XX
XX 03-MAR-1999; 99DE-01009146.
XX
XX (MARA/) MARAHTEL M A.
XX PA (STAC/) STACHELHAUS T.
XX PA (MOOT/) MOOTZ H.
XX PA (KONZ/) KONZ D.
XX
XX Marahiel MA, Stachelhaus T, Mootz H, Konz D;
XX WPI; 2000-572182/53.
XX
XX Non-ribosomal synthesis of peptides, e.g. antibiotics or
XX immunosuppressants, using non-ribosomal peptide synthase with targeted
XX modifications in adenylation domains.
XX
XX Example 1; Page 39; 52pp; German.
XX
XX This invention describes a novel method for the targeted non-ribosomal
XX synthesis of peptides (I) of required structure, comprising altering one
XX or more A (adenylation) domain-encoding DNA segments (II) that encodes a
XX non-ribosomal peptide synthetase so that the expression product of the
XX altered (II) can produce (I), is new. Alterations in the A-domains are
XX made according to a non-ribosomal code reproduced in the specification.
XX The method is used to synthesize (I) with antibiotic, immunosuppressant,
XX cytostatic, antiviral, antihelminthic, fungicidal or surface-active
XX properties, and to alter specifically and/or activity of known
XX biologically active compounds, e.g. to improve their solubility by
XX replacing hydrophobic amino acids with hydrophilic ones, or vice versa.
XX AAA97960-A97995 represent PCR primers used to illustrate the method of
XX the invention. (Updated on 15-SEP-2003 to standardise OS field)
XX
XX Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1515 ACTAAGAGATTCACTAC 1534
DB 1 ACTACAGCAGCTCTCAGCTAC 20
XX
XX RESULT 1811
XX AAF76673/C
XX ID AAF76673 standard; DNA; 20 BP.
XX
XX AAF76673;
XX
XX 16-MAY-2001 (first entry)
XX DT
XX
XX Bone resorption modulation method related sequence SEQ ID NO: 1.
XX
XX Bone resorption modulation; leptin; osteoporosis; Paget's disease;
XX osteoclastogenesis; ds.
XX
XX Homo sapiens.
XX
XX AU200048971-A.
XX
XX 08-FEB-2001.
XX
XX 01-AUG-2000; 2000AU-00048971.
XX PF
XX 03-AUG-1999; 99AU-00001999.
XX PR
XX (UYME ) UNIV MELBOURNE.
XX PA
XX Nicholson GC;
XX PI
XX XX
```

DR	WPI, 2001-235416/25.
XX	
PT	Modulating bone resorption in human or animal for treating osteoporosis
PT	or Paget's disease, comprises administering leptin, its derivative,
PT	homologue, analog, chemical equivalent, antagonist or agonist.
XX	
PS	Disclosure: Page 23, 40pp; English.
XX	
CC	The present invention describes a method of modulating bone resorption
CC	comprising administering leptin or a derivative under conditions suitable
CC	for the modulation of osteoclastogenesis. This is useful in the treatment
CC	of osteoporosis and Paget's disease. No further information about this
CC	sequence is given in the specification
XX	
SQ	Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
Query Match	0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity	80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative	0; Mismatches 4; Indels 0; Gaps 0;
QY	122 CCATGATCGATGATGAGAAG 141
Db	20 CCTTGATCTGATGCAGTGG 1
RESULT 1812	
AAD14761	
ID	AAD14761 standard; DNA; 20 BP.
XX	
AC	AAD14761;
XX	
DT	01-NOV-2001 (first entry)
XX	
DE	Human glycogen synthase kinase 3 alpha antisense oligo ISIS #116602.
XX	
KW	Human; glycogen synthase kinase 3 alpha; antidiabetic; cyostatic;
KW	antisense therapy; diabetes; hyperproliferative disorder; inflammation;
KW	neurological disorder; tumour; haematopoietic disorder; infection;
KW	hyperproliferative disorder; developmental disorder; antisense;
KW	phosphorothioate backbone; ss.
XX	
OS	Homo sapiens.
OS	Synthetic.
XX	
FH	Key
FT	modified_base
FT	1. .20
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "Phosphorothioate backbone"
FT	1. .5
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "Methoxyethyl residues"
FT	1
FT	/*tag= d
FT	/mod_base= m5c
FT	3
FT	/*tag= e
FT	/mod_base= m5c
FT	4
FT	/*tag= f
FT	/mod_base= m5c
FT	6
FT	/*tag= g
FT	/mod_base= m5c
FT	9
FT	modified_base
FT	/*tag= h
FT	/mod_base= m5c
FT	10
FT	modified_base
FT	/*tag= i
FT	/mod_base= m5c
FT	12
FT	modified_base
FT	/*tag= j

FT		/mod_base= m5c
FT	modified_base	13
FT		/tag= k
FT		/mod_base= m5c
FT	modified_base	15
FT		/tag= l
FT		/mod_base= m5c
FT	modified_base	16..20
FT		/tag= c
FT		/mod_base= OTHER
FT		/note= "Methoxyethyl residues"
FT	modified_base	16
FT		/tag= m
FT		/mod_base= m5c
FT	modified_base	18
FT		/tag= n
FT		/mod_base= m5c
FT	modified_base	19
FT		/tag= o
FT		/mod_base= m5c
XX		
PX	WO200152865-A1.	
XX		
PD	26-JUL-2001.	
XX		
PF	16-JAN-2001; 2001WO-US001411.	
XX		
PR	21-JAN-2000; 2000US--00488856.	
XX		
PA	(ISIS-) ISIS PHARM INC.	
PI	Monia BP, McKay R, Butler WM, Wyatt JR;	
XX		
DR	WPI, 2001-442247/47.	
XX		
PT	Antisense compound 8 to 30 nucleobases in length comprising a compound	
PT	that is targeted to a nucleic acid molecule encoding glycogen synthase	
PT	kinase 3 alpha, useful for the treatment of e.g. diabetes and	
PT	hyperproliferative disorders.	
XX		
XX		
PS	Example 15; Page 82; 115pp; English.	
XX		
CC	The invention relates to an antisense compound 8 to 30 nucleobases in	
CC	length targeted to a nucleic acid encoding glycogen synthase kinase 3	
CC	alpha. The antisense compound specifically hybridises with and inhibits	
CC	the expression of glycogen synthase kinase 3 alpha. The antisense	
CC	compound is useful for the treatment of a diseases associated with	
CC	glycogen synthase kinase 3 alpha such as diabetes; a neurological	
CC	disorder, a haematopoietic disorder, a hyperproliferative disorder or a	
CC	developmental disorder. The antisense compounds may also be used	
CC	prophylactically to prevent or delay infection, inflammation or tumour	
CC	formation. The present sequence is a phosphorothioate antisense	
CC	oligonucleotide targeted to human glycogen synthase kinase 3 alpha DNA	
XX		
SSQ	Sequence 20 BP; 0 A; 12 C; 4 G; 4 T; 0 U; 0 Other;	
	Query Match	0.8%; Score 13.6; DB 1; Length 20;
	Best Local Similarity	80.0%; Pred.No.1,1e+03;
	Matches	16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY		
	556 CTCAGCGCGCGCTCCGTCG 575	
	1 CTCCGCTGCCCTCCTCCGCG 20	
DB		
	RESULT 1813	
	ABA04587/C	
ID	ABA04587 standard; DNA; 20 BP.	
XX		
AC	ABA04587;	
XX		
DT	15-FEB-2002 (first entry)	
XX		

DE Oligonucleotide #7.  
XX Analytical support; genomic sequencing; mutation detection;  
KW pharmaceutical development; ss.  
XX Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = FI(CH2)6-PO-thymine, where FI is flavine  
FT and PO is a phosphate group"  
XX  
XX FR2805348-A1.  
XX  
XX PD 24-AUG-2001.  
XX PF 23-FEB-2000; 2000FR-00002236.  
XX PR 23-FEB-2000; 2000FR-00002236.  
XX PA (COMS ) COMMISSARIAT ENERGIE ATOMIQUE.  
XX PI Cuzin M, Pellet P, Fontecave M, Decout JL, Dueymes C;  
XX WPI; 2001-628265/73.  
XX DR  
XX PT Support for hybridization analysis of nucleic acids for sequencing  
XX techniques, comprises an array of oligonucleotides having a label where  
XX the fluorescence changes follow hybridization.  
XX PS Example 8; Page 18; 33pp; French.  
XX  
XX CC The present invention relates to an analytical support, to which a number  
XX of oligonucleotides are fixed. The oligonucleotides are labelled with a  
XX fluorescent compound, the fluorescence of which varies when the  
XX oligonucleotide hybridises to its complement. The analytical support is  
XX useful in hybridisation testing for identification of specific nucleic  
XX acids, such as genomic sequencing, detecting mutations or pharmaceutical  
XX development. The present oligonucleotide was used to illustrate the  
XX invention  
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
DB 226 GAGAGTGTGCTGTGGCGG 245  
20 GAGAGGGGAAAGTGTGGGG 1  
RESULT 1814  
AAC81175/C  
ID AAC81175 standard; DNA; 20 BP.  
XX AAC81175;  
XX  
XX 23-FEB-2001 (first entry)  
XX  
XX Human bcl-6 phosphorothioate antisense oligonucleotide, SEQ ID NO:41.  
XX  
XX Human; bcl-6; transcriptional repressor; germinal centre formation;  
KW Th-2 mediated antibody affinity maturation; apoptosis regulator;  
KW chromosome 3q27; lymphoma; acute lymphoblastic leukaemia;  
KW post-transplant lymphoproliferative disorder; expression inhibition;  
KW phosphorothioate; antisense oligonucleotide; ss.  
XX  
XX Homo sapiens.  
XX  
XX US6140125-A.  
XX  
XX

XX 31-OCT-2000.  
XX  
XX PD 15-OCT-1999; 99US-00418640.  
XX PF 15-OCT-1999; 99US-00418640.  
XX PR 15-OCT-1999; 99US-00418640.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Taylor JK, Cowse LM;  
XX WPI; 2001-048959/06.  
XX DR  
XX PT Antisense compounds which specifically hybridize with and inhibit human  
XX bcl-6 expression, useful for treating bcl-6 related disorders, and  
XX preventing or delaying inflammation or tumor formation.  
XX  
XX Claim 14; Col 41-42; 42pp; English.  
XX  
XX PS Sequences AAC81144-C81223 represent antisense oligonucleotides targeted  
XX to the human bcl-6 gene, which inhibit its expression. The antisense  
XX oligonucleotides were designed to target different regions of the human  
XX bcl-6 mRNA, and were analysed for their effect on bcl-6 mRNA levels by  
XX quantitative real-time PCR. Bcl-6 (also known as B-cell CLL/ lymphoma 6,  
XX zinc finger protein 51 and IAB2) is a sequence-specific DNA-binding  
XX transcriptional repressor. The bcl-6 gene is expressed in germinal centre  
XX B- and T- cells and is required for germinal centre formation and Th-2  
XX mediated antibody affinity maturation. Bcl-6 may also play a role in the  
XX regulation of apoptosis. The bcl-6 gene is located on chromosome 3q27, a  
XX region which undergoes a high frequency of translocation events. Such  
XX chromosomal translocations can result in aberrant forms of bcl-6, which  
XX are strongly implicated in the pathogenesis of several types of lymphoma,  
XX and have also been reported in acute lymphoblastic leukaemia and post-  
XX transplant lymphoproliferative disorders. The oligonucleotides of the  
XX invention are useful for diagnosis, prevention and treatment of  
XX conditions associated with aberrant forms of bcl-6, such as lymphomas,  
XX acute lymphoblastic leukaemia and post-transplant lymphoproliferative  
XX disorders  
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
DB 494 TCCGGCTGCTGTGGGCTAC 513  
20 TCCGGATGCTGTGGCCAAC 1  
RESULT 1815  
AAF58196/C  
ID AAF58196 standard; DNA; 20 BP.  
XX AAF58196;  
XX  
XX 23-APR-2001 (first entry)  
XX  
XX Primer #16.  
XX  
XX Human; multiple tumour suppressor; MTS; cancer; gene therapy; ss.  
XX  
XX Homo sapiens.  
XX  
XX US6180776-B1.  
XX  
XX PD 30-JAN-2001.  
XX PF 22-JUL-1998; 98US-00120129.  
XX PR 18-MAR-1994; 94US-00214582.  
XX PR 18-MAR-1994; 94US-00215086.  
XX PR 18-MAR-1994; 94US-00215087.  
XX  
XX

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PR      01-JUN-1994;      94US-00251938.
PR      17-MAR-1995;      95WO-US00316.
PR      07-JUN-1995;      95US-0046047.
XX
PA      (MYRI-) MYRIAD GENETICS INC.
XX
PI      Kamb A;
XX
DR      WPI, 2001-158668/16.
XX
PT      Novel multiple tumor suppressor gene useful for diagnosing, prognosing
PT      and treating cancers, such as melanoma, leukemia, glioblastoma and
PT      Hodgkin's lymphoma.
XX
PS      Example 12; Col 50; 71pp; English.
XX
CC      The present invention relates to human multiple tumor suppressor-2 (MTS2)
CC      gene. The invention is useful for diagnosing, prognosing and treating
CC      cancers. It is also useful for screening drugs for cancer therapy and
CC      gene therapy
XX
SO      Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred.No.1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      505 GAGGGCTACCGAGAGAGCT 524
      |||||
DB      20 GAAGGCTTCCTGACACGCT 1

RESULT 1816
AADI1340
ID      AADI1340 standard; DNA; 20 BP.
XX
AC      AADI1340;
XX
DT      24-SEP-2001 (first entry)
XX
DE      Human cot oncogene antisense oligonucleotide, ISIS 116381.
XX
KW      Human; cot oncogene; antisense therapy; inflammation; cancer; antisense;
KW      immune system disorder; prophylaxis; cytostatic; immunomodulator; Tpl-2;
KW      est; phosphorothioate backbone; ss.
XX
OS      Homo sapiens.
OS      Synthetic.
XX
FH      Key
FH      modified_base
FT      1..20
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "Phosphorothioate backbone"
FT      1..5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl residues"
FT      8
FT      /*tag= d
FT      /mod_base= m5c
FT      13
FT      /*tag= e
FT      /mod_base= m5c
FT      16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl residues"
XX
XX      US6265216-B1.
XX
XX      24-JUN-2001.
XX

```

```
PF 20-JAN-2000; 2000US-00489668.
XX
XX 20-JAN-2000; 2000US-00489668.
XX
PA (ISIS-) ISIS PHARM INC.
PI Bennett CF, Wyatt J;
XX
DR WPI; 2001-463936/50.
XX
PT New antisense oligonucleotides for modulating cot oncogene expression,
PT particularly useful for diagnosing or treating diseases associated with
PT expression of cot oncogene, such as inflammation, cancer or immune system
PT disorders.
XX
PS Example 15; Col 41, 39pp; English.
XX
CC The invention relates to antisense oligonucleotides, compositions and
CC methods for modulating cot oncogene expression. The cot oncogene is also
CC known as Tpl-2 and est. The compositions comprise antisense compounds,
CC particularly antisense oligonucleotides, targeted to nucleic acids
CC encoding cot oncogene. The antisense oligonucleotides are useful for
CC modulating the expression of cot oncogene and for treating diseases
CC associated with expression of cot oncogene, e.g. inflammation, cancer or
CC disorders of the immune system. The antisense oligonucleotides are also
CC useful for diagnosis or prophylaxis or as research reagents and kits. The
CC present sequence is human cot oncogene antisense oligonucleotide, ISIS
CC 115381. This sequence was targeted towards the coding region of human
CC cot oncogene
XX
SQ Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

Query March          0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred.No.1.le+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0.

      627 GGACAACTGGGCGAGGGTA 646
OY      ||| ||| ||| ||| |||
        1 GGAIRGGCTAGCGAGGGTA 20

RESULT 1817
AAS4585/c
ID AAS45859 standard; DNA; 20 BP.
XX
AC AAS45859;
XX
XX 18-DEC-2001 (first entry)
DT
XX
DE Human PARP-3 antisense inhibitor ISIS #126059.
XX
XX Human; ss; PARP, Poly (ADP-ribose) polymerase; antisense oligonucleotide;
XX cytosolic; nocotropic; neuroprotective; antiinflammatory; antidiabetic;
XX immunosuppressant; hyperproliferative disorder; cancer; cellular injury;
XX oxidative stress; neurological disorder; parkinsonism; apoptosis;
XX meningitis-associated intracranial complication; ischaemia, probe;
XX inflammatory disorder; autoimmune disorder; arthritis; diabetes.
XX
XX Homo sapiens.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /*tag= c
FT 1..5
FT /mod_base= OTHER
FT modified_base
FT /*tag= c
FT /note= "2'-methoxyethyl nucleotides"
```

```
FT modified_base 16..20
FT /*tag= d
FT /mod_base= OTHER
FT /note= "2' methoxyethyl nucleotides"
XX
XX WO200164955-A1.
XX
XX 07-SEP-2001.
XX
XX 01-MAR-2001; 2001WO-US006572.
XX
XX 02-MAR-2000; 2000US-00517467.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Cowser LM;
XX
XX WPI; 2001-602570/68.
XX
XX Antisense compound useful for treating hyperproliferative, neurological,
XX inflammatory and autoimmune disorders and diabetes inhibits human PARP.
XX
XX Example 18; Page 91; 168pp; English.
XX
XX The invention relates to antisense oligonucleotides targeted to human
XX PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly
XX (ADP-ribose) polymerase plays an important role in chromatin
XX decondensation, DNA replication, DNA repair, gene expression, malignant
XX transformation, cellular differentiation and apoptosis. The antisense
XX oligonucleotide inhibitors are useful for inhibiting the expression of
XX PARP in human cells or tissues. They are also useful for treating a human
XX with a disease associated with PARP especially hyperproliferative
XX disorders (e.g. cancer), cellular injury resulting from oxidative stress,
XX neurological (e.g. parkinsonism, meningitis-associated intracranial
XX complications and ischaemia), inflammatory and autoimmune disorders (e.g
XX arthritis) and diabetes. The present sequence is an antisense
XX oligonucleotide of the invention
XX
XX Sequence 20 BP; 2 A; 3 C; 8 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 774 CCTCAACACGCCACATCG 793
Db 20 CCTGAACGACCAACATCG 1
RESULT 1818
AAS45704/C
ID AAS45704 standard; DNA; 20 BP.
XX
XX AAS45704;
XX
XX 18-DEC-2001 (first entry)
XX
XX Human PARP-2 antisense inhibitor ISIS #126144.
XX
XX Human; ss; PARP; Poly (ADP-ribose) polymerase; antisense oligonucleotide;
XX cytostatic; neurotropic; neuroprotective; antiinflammatory; antidiabetic;
XX immunosuppressant; hyperproliferative disorder; cancer; cellular injury;
XX oxidative stress; neurological disorder; parkinsonism; apoptosis;
XX meningitis-associated intracranial complication; ischemia; probe;
XX inflammatory disorder; autoimmune disorder; arthritis; diabetes.
XX
XX Homo sapiens.
XX
XX Key location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
```

```
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "All cytidine residues are 5-methyl cytidine"
XX
XX modified_base 1..5
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl nucleotides"
XX
XX modified_base 16..20
XX /*tag= d
XX /mod_base= OTHER
XX /note= "2' methoxyethyl nucleotides"
XX
XX WO200164955-A1.
XX
XX 07-SEP-2001.
XX
XX 01-MAR-2001; 2001WO-US006572.
XX
XX 02-MAR-2000; 2000US-00517467.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Cowser LM;
XX
XX WPI; 2001-602570/68.
XX
XX Antisense compound useful for treating hyperproliferative, neurological,
XX inflammatory and autoimmune disorders and diabetes inhibits human PARP.
XX
XX Example 16; Page 86; 168pp; English.
XX
XX The invention relates to antisense oligonucleotides targeted to human
XX PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly
XX (ADP-ribose) polymerase plays an important role in chromatin
XX decondensation, DNA replication, DNA repair, gene expression, malignant
XX transformation, cellular differentiation and apoptosis. The antisense
XX oligonucleotide inhibitors are useful for inhibiting the expression of
XX PARP in human cells or tissues. They are also useful for treating a human
XX with a disease associated with PARP especially hyperproliferative
XX disorders (e.g. cancer), cellular injury resulting from oxidative stress,
XX neurological (e.g. parkinsonism, meningitis-associated intracranial
XX complications and ischaemia), inflammatory and autoimmune disorders (e.g
XX arthritis) and diabetes. The present sequence is an antisense
XX oligonucleotide of the invention
XX
XX Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1055 AGTCAATCCCAACAGCA 1074
Db 20 AGCAATCTCAACAGGCCA 1
RESULT 1819
AAC92774/C
ID AAC92774 standard; DNA; 20 BP.
XX
XX AAC92774;
XX
XX 27-MAR-2001 (first entry)
XX
XX Human hnRNP A1 phosphorothioate antisense oligonucleotide, SEQ ID NO:46.
XX
XX Human hnRNP A1; heterogeneous nuclear ribonucleoprotein A1;
XX heterogeneous nuclear ribonucleoprotein core protein A1; p40CRS;
XX mRNA processing; transport; stabilisation; alternative splicing;
XX donor splice site selection; telomere biogenesis; oncogenesis;
XX apoptosis-associated protein; cancer; tumour formation;
XX expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
```

XX Homo sapiens.  
OS  
XX US6165789-A.  
PN  
XX 26-DEC-2000.  
PD  
XX 27-OCT-1999; 99US-00428696.  
PF  
XX 27-OCT-1999; 99US-00428696.  
PR  
XX 27-OCT-1999; 99US-00428696.  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Monia BP, Cowsett LM;  
PI  
XX WPI; 2001-090484/10.  
DR  
XX  
XX Novel antisense compound targeted to human hnRNP A1 which specifically  
PT hybridizes with and inhibits the expression of human hnRNP A1, useful for  
PT modulating the expression of hnRNP A1 in cells.  
XX  
XX Example 15; Col 41-42; 38pp; English.  
PS  
XX Sequences AAC92738-C92817 represent antisense oligonucleotides targeted  
CC to the heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) gene, which  
CC inhibit its expression. The antisense oligonucleotides were designed to  
CC target different regions of the human hnRNP A1 mRNA, and were analysed  
CC for their effect on hnRNP A1 mRNA levels by quantitative real-time PCR.  
CC hnRNP A1 (also known as heterogeneous nuclear ribonucleoprotein core  
CC protein A1 and p40CRS) is thought to function in the stabilisation,  
CC transport and processing (including alternative splicing) of newly  
CC synthesised mRNAs. It facilitates the annealing of single-stranded  
CC nucleic acids, modulates the binding of snRNPs to RNA intron sequences,  
CC and shuttles continuously between the nucleus and the cytoplasm acting as  
CC a carrier protein for mRNAs. hnRNP A1 also participates in telomere  
CC biogenesis, with low levels of hnRNP correlating with shortened  
CC telomeres. In addition, hnRNP A1 has also been classified as an apoptosis  
CC -associated protein on the basis that it is specifically cleaved into  
CC three fragments during antibody-mediated apoptosis. Due to its ability to  
CC control splicing events, particularly donor splice site selection, hnRNP  
CC A1 is implicated in the process of oncogenesis. The oligonucleotides of  
CC the invention are useful for diagnosis, prevention and treatment of  
CC conditions associated with hnRNP A1 expression, such as cancer  
XX  
SQ Sequence 20 BP; 6 A; 12 C; 1 G; 1 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 231 TGGTGTGTGTGCGGAGTG 250  
Db 20 TGGTGTGTGTGTGAGAGTG 1  
RESULT 1820  
AA60944/c 0.8%; Score 13.6; DB 1; Length 20;  
ID AA60944 standard; DNA; 20 BP.  
XX  
XX AA60944;  
AC  
XX  
XX 15-MAY-2001 (first entry)  
DT  
XX  
XX Anti-ICAM-1 oligonucleotide SEQ ID 53.  
DE  
XX  
XX Transport; membrane; cytosolic; vitruide; vasotropic; dermatological;  
KM antiapoptotic; antiaschmatic; gene therapy; tumor cell; antisense;  
KW tumor therapy; drug; ss.  
XX  
XX Unidentified.  
OS  
XX  
XX DEL9935302-A1.  
PN  
XX

PD 08-FEB-2001.  
XX  
XX 28-JUL-1999; 99DE-01035302.  
PF  
XX  
XX 28-JUL-1999; 99DE-01035302.  
PR  
XX  
XX (AVET ) AVENTIS PHARMA DEUT GMBH.  
PA  
XX  
XX Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;  
PI  
XX WPI; 2001-203679/21.  
DR  
XX  
XX  
XX New substituted aryl conjugates of parent molecules, especially  
PT oligonucleotides, having improved transmembrane and intracellular  
PT transport properties, useful as medicaments or diagnostic agents.  
XX  
XX  
XX Disclosure; Page 8; 28pp; German.  
PS  
XX  
XX This invention describes a novel conjugate (I) which consists of (A) a  
CC molecule to be transported and (B) at least one aryl residue of formula -  
CC Ar-(X-C(Y)-R<sub>1</sub>)<sub>n</sub> (II). Ar = group containing at least one aromatic ring;  
CC Ar = X-C(Y)-R<sub>1</sub>)<sub>n</sub> (II). Ar = group containing at least one aromatic ring;  
CC X = O or N (sic); Y = O, S or NH-R<sub>2</sub> (sic); R<sub>1</sub> = optionally substituted  
CC 1-23C alkyl (optionally containing double and/or triple bonds); R<sub>2</sub> =  
CC optionally substituted 1-18C alkyl (optionally containing double and/or  
CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or  
CC via a chemical group, provided that the chemical group is other than CH<sub>2</sub>-  
CC S if the bond is via a phosphodiester linkage of (A). The invention also  
CC describes (i) the preparation of a conjugate (I') of (A') a molecule to  
CC be transported and (B') at least one aryl residue (not restricted to  
CC (II')), by preparing (A') containing a reactive function at the position  
CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');  
CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical  
CC group) for transporting (A) across biological membranes. The products of  
CC the invention have cytostatic, virocidic, vasotropic, dermatological,  
CC antiproliferative and antitumour activity and can be used for gene  
CC therapy. Conjugation of (A) with (B) is useful for transporting (A)  
CC across biological membranes or into eukaryotic or prokaryotic cells  
CC (specifically bacterial, yeast or mammalian cells, including human cells,  
CC particularly tumor cells). Medicaments, diagnostic agents and test kits  
CC containing (I) are also claimed. Typically (I) are antisense  
CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for  
CC treating viral infections or diseases associated with integrins or cell-  
CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or  
CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ  
CC hybridization. Conjugation with (B) markedly improves the cellular uptake  
CC of (A), e.g. in tumor cells. (B) include fluorescently labeled residues,  
CC in which case the conjugates (I) are fluorescently labeled, allowing  
CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)  
CC is superior to that obtained using other conjugated groups related to  
CC (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within  
CC the scope of (B)) have superior uptake to corresponding fluorescein  
CC conjugates  
XX  
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 226 GAGAGTGTGTGTGTGTGCGG 245  
Db 20 GAGAGTGTGTGTGTGTGCGG 1  
RESULT 1821  
AAD17434 0.8%; Score 13.6; DB 1; Length 20;  
ID AAD17434 standard; DNA; 20 BP.  
XX  
XX AAD17434;  
AC  
XX  
XX 29-NOV-2001 (first entry)  
DT  
XX  
XX Mouse sfrp3 gene specific forward RT-PCR primer.  
DE

XX Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma;  
KM chronic obstructive pulmonary disease; COPD; antisense therapy; mouse;  
XX emphysema; reverse transcription PCR; RT-PCR primer; sfrp3 gene; ss.  
XX Mus sp.  
XX WO200164717-A1.  
XX  
XX  
XX 07-SEP-2001.  
XX  
XX 28-FEB-2001; 2001WO-US006579.  
XX  
XX 29-FEB-2000; 2000US-00514885.  
XX  
XX (UYCO ) UNIV COLUMBIA NEW YORK.  
XX  
XX D'armiento J, Imai K;  
XX WPI; 2001-557764/62.  
XX  
XX Inhibition of apoptosis for the treatment or prevention of obstructive  
PT pulmonary disease comprises inhibiting expression of secreted Frizzled-  
PT related protein gene in lung cells.  
XX  
XX Example 2; Page 35; 79pp; English.  
XX  
XX The present sequence is mouse secreted Frizzled-related protein (sfrp3)  
CC gene specific reverse transcription PCR (RT-PCR) primer. The invention  
CC relates to a method for treating or preventing chronic obstructive  
CC pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis  
CC in a subject. The method involves administering to the subject, an agent  
CC effective to inhibit apoptosis by inhibiting the expression of a secreted  
CC Frizzled-related protein (sFRP) gene. It is also useful in antisense  
CC therapy  
XX  
XX Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;  
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 890 ACATCATCAACATGCACAAC 909  
DB 1 ACATGACCAAGATGCCCAAC 20  
RESULT 1822  
AADI7410  
ID AADI7410 standard; DNA; 20 BP.  
XX  
XX AADI7410;  
XX  
XX 29-NOV-2001 (first entry)  
XX  
XX Human sFRP4 gene specific forward RT-PCR primer.  
DE  
XX Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma;  
KM chronic obstructive pulmonary disease; COPD; antisense therapy; human;  
KM emphysema; reverse transcription PCR; RT-PCR primer; sFRP4 gene; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO200164717-A1.  
XX  
XX 07-SEP-2001.  
XX  
XX 28-FEB-2001; 2001WO-US006579.  
XX  
XX 29-FEB-2000; 2000US-00514885.  
XX  
XX (UYCO ) UNIV COLUMBIA NEW YORK.  
XX

PI D'armiento J, Imai K;  
XX  
XX WPI; 2001-557764/62.  
XX  
XX Inhibition of apoptosis for the treatment or prevention of obstructive  
PT pulmonary disease comprises inhibiting expression of secreted Frizzled-  
PT related protein gene in lung cells.  
XX  
XX Example 2; Page 35; 79pp; English.  
XX  
XX The present sequence is human secreted Frizzled-related protein 4 (sFRP4)  
CC gene specific reverse transcription PCR (RT-PCR) primer. The invention  
CC relates to a method for treating or preventing chronic obstructive  
CC pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis  
CC in a subject. The method involves administering to the subject, an agent  
CC effective to inhibit apoptosis by inhibiting the expression of a secreted  
CC Frizzled-related protein (sFRP) gene. It is also useful in antisense  
CC therapy  
XX  
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;  
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 1289 TCCTGTCCACGAGGAGTTC 1308  
DB 1 TCCTGTCCATCGAGAGTAC 20  
RESULT 1823  
AAS02589/c  
ID AAS02589 standard; DNA; 20 BP.  
XX  
XX AAS02589;  
XX  
XX 29-AUG-2001 (first entry)  
XX  
XX PCR primer RP.2(rev) used in analysis of MTS1 and MTS2.  
DE  
XX Human; multiple tumor suppressor; MTS1; MTS2; therapeutic; diagnostic;  
KM cancer; gene therapy; melanoma; leukaemia; astrocytoma; glioblastoma;  
KM lymphoma; glioma; Hodgkin's lymphoma; chronic lymphatic leukaemia;  
XX PCR primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX US6210949-B1.  
XX  
XX 03-APR-2001.  
XX  
XX 30-NOV-1998; 98US-00201139.  
XX  
XX 17-MAR-1995; 95WO-US003316.  
XX 07-JUN-1995; 95US-00487033.  
XX 28-JUL-1995; 95US-00508735.  
XX  
XX (MYRI-) MYRIAD GENETICS INC.  
XX  
XX Stone S, Jiang P, Kamb A;  
XX  
XX WPI; 2001-280859/29.  
XX  
XX New mouse multiple tumor suppressor gene, useful for diagnosing or  
PT prognosing human cancer or as gene therapy for treating cancer,  
PT particularly melanoma, leukemia, astrocytoma, lymphoma or cancers of the  
PT pancreas or breast.  
XX  
XX Example 7; Col 40; 80pp; English.  
XX  
XX The sequence represents PCR primer RP.2(rev) used in analysis of multiple  
CC tumour suppressor MTS1 and MTS2. The MTS genes, and expression products,  
CC are useful for treating, diagnosing or prognosing human cancer. in



CC particular, the MTS gene is useful for diagnosing a predisposition to or  
CC as a gene therapy for melanoma, leukemia, astrocytoma, glioblastoma,  
CC lymphoma, glioma, Hodgkin's lymphoma, chronic lymphatic leukaemia (CLL),  
CC or cancers of the pancreas, breast, thyroid, ovary, uterus, testis,  
CC kidney, stomach or rectum. The gene may be used in both cancerous and pre  
CC -cancerous cells  
CC  
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 505 GAGGCTTCTGTGACACGCT 524  
DB 20 GAAGGCTTCTGTGACACGCT 1  
RESULT 1824  
AAS09545/C  
ID AAS09545 standard; DNA; 20 BP.  
XX  
AC AAS09545;  
XX  
DT 24-OCT-2001 (first entry)  
XX  
DE FITC-labeled ICAM oligonucleotide.  
XX  
KM FITC; ICAM; oligonucleotide; ss; fluorescein isothiocyanate; VP22; BH3;  
KM apoptosis; hyper-proliferating cell; cancer; tumour; eczema;  
KM cell-cycle progression regulating cell; genital warts; testenosis; skin cancer;  
KM psoriasis; scar tissue; intracellular-adhesion molecule.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1  
FT /\*tag= a  
FT /note= "C is labeled with FITC"  
XX  
XX WO200147960-A1.  
XX  
XX 05-JUL-2001.  
XX  
XX 21-DEC-2000; 2000WO-GB004965.  
XX  
XX 24-DEC-1999; 99GB-00030519.  
XX  
XX (PHOG-) PHOGEN LTD.  
XX  
XX O'hare PFJ, Normand NM, Brewis ND, Phelan A;  
XX  
XX WPI; 2001-418224/44.  
XX  
XX Inhibiting cancer cell proliferation by exposing cells to a composition  
XX of fusion proteins comprising VP22 polypeptides coupled to cell cycle  
XX progression regulators, and further exposing cells to cell death  
XX stimulants.  
XX  
XX  
XX Disclosure; Page 14; 23pp; English.  
XX  
XX The sequence represents an FITC (fluorescein isothiocyanate) labeled  
XX oligonucleotide complementary to part of the mRNA encoding the  
XX intracellular-adhesion molecule ICAM. The oligonucleotide is included in  
XX a composition comprising a fusion protein of herpes virus VP22 protein  
XX 159-301 (having the transport function) and a cell-cycle progression  
XX regulator (or its DNA) e.g. BH3 or apoptotic proteins. The composition is  
XX used to reduce the proliferation of cells. The method of making the VP22  
XX containing compositions is used for reducing proliferation of hyper-  
XX proliferating cells e.g., cancer cells, for manufacturing a medicament to  
XX reduce or treat cell proliferation e.g., cancer cell proliferation. The  
XX method is also used for reducing or treating cell proliferation, in

CC tumour cells present in tumour cell mass, non-malignant cells e.g.,  
CC benign tumour cells such as genital warts, smooth muscle cells present in  
CC testenosis, proliferating skin cells e.g., skin cancer, psoriasis or  
CC eczema skin cells, or proliferating cells of scar tissue  
CC  
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 226 GAGAGTGAGTGTGCGG 245  
DB 20 GAGAGGGAAGTGTGCGG 1  
RESULT 1825  
AAH42979/C  
ID AAH42979 standard; DNA; 20 BP.  
XX  
AC AAH42979;  
XX  
DT 15-OCT-2001 (first entry)  
XX  
DE PCR primer used to amplify a k-ras DNA sequence.  
XX  
XX HPV; genetic disease; gene anomaly; infectious disease; chlamydia;  
XX congenital genetic disease; cancer; human papilloma virus; k-ras;  
XX cystic fibrosis; mitochondrial cerebrohypopathy; cervical cancer;  
XX colon cancer; PCR primer; ss.  
XX  
OS Unidentified.  
XX  
XX WO200159124-A1.  
XX  
XX 16-AUG-2001.  
XX  
XX 09-FEB-2000; 2000WO-JP000693.  
XX  
XX 09-FEB-2000; 2000WO-JP000693.  
XX  
XX (SAPP-) SAPPORO IMMUNO DIAGNOSTIC LAB.  
XX  
XX Yamaguchi A, Kikuchi K, Nakamura K;  
XX  
XX WPI; 2001-497079/54.  
XX  
XX Convenient and cheap microplate fluorescent screening method for  
XX detecting gene anomaly in e.g. infectious diseases, congenital genetic  
XX diseases or cancers through gene diagnosis in community screening test  
XX program.  
XX  
XX Claim 7; Page 22; 26pp; Japanese.  
XX  
XX PCR primers AAH42977-80 were used to amplify k-ras DNA sequences. The  
XX primers are used in the method of the invention. The specification  
XX describes a method for screening genetic diseases. The method comprises  
XX using DNA simply extracted from a biological specimen such as scraped  
XX mucosal cells and tissue slide pieces fixed with formalin and embedded in  
XX paraffin, and amplifying a target region by polymerase chain reaction  
XX (PCR) for direct fluorescence measurement of the additional double-  
XX stranded DNA intercalator. The method is used for detecting gene anomaly  
XX in e.g. infectious diseases, congenital genetic diseases or cancers,  
XX including infection disease due to human papilloma virus and chlamydia  
XX genetic diseases like cystic fibrosis, mitochondrial cerebrohypopathy,  
XX cancers of cervical cancer and colon cancer, through gene diagnosis in  
XX community screening test program  
XX  
SQ Sequence 20 BP; 2 A; 1 C; 9 G; 8 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1310 AGACATACACTACCCCAAG 1329  
| | | | | | | | | | | | | | | | | | | | | |  
DB 20 AACCTCCAACTACCAAG 1

## RESULT 1826

AA99116/C  
ID AA99116 standard; DNA; 20 BP.

AA99116;  
AC  
XX  
XX  
XX

12-JUN-2001 (first entry)  
DT  
XX  
XX

Immunostimulatory nucleic acid #232.  
DE

Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KM immunostimulatory; tumour; viral infection; bacterial infection;  
KM fungal infection; parasitic infection; cancer; asthma;  
KM infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX  
XX

Synthetic.  
OS

WO200122972-A2.  
PN

05-APR-2001.  
PD

25-SEP-2000; 2000WO-US026383.  
PF

25-SEP-1999; 99US-0156113P.  
PR

27-SEP-1999; 99US-0156135P.  
PR

23-AUG-2000; 2000US-0227436P.  
PR

(IOWA ) UNIV IOWA RES FOUND.  
PA

(COLE-) COLEY PHARM GMBH.  
PI

Krieg AM, Schetter C, Vollmer J;  
PI

Vaccinating against tumors, infectious diseases, allergies and asthma  
PT

using immunostimulatory Py-rich and TG nucleic acids.  
PS

Claim 101; Page 43; 338pp; English.  
XX

The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX  
SQ

Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 555 CCTCAGCCGCCGCTCCGTC 574  
| | | | | | | | | | | | | | | | | | | | | |  
DB 20 CCGCCGCCGCCGCCGCCGCC 1

## RESULT 1827

AAH41775

ID AAH41775 standard; DNA; 20 BP.

AAH41775;  
AC

29-AUG-2001 (first entry)  
DT

p38 gene PCR primer SEQ ID NO:22.  
DE

Base; string; tape; circular disc; ligand; immobilised; PCR primer;  
KM detection; diagnosis; ss.  
XX  
XX  
XX

Synthetic.  
OS

WO200135098-A1.  
PN

17-MAY-2001.  
PD

24-OCT-2000; 2000WO-JP007415.  
PF

05-NOV-1999; 99JP-00315610.  
PR

(TAKI ) TAKARA SHUZO CO LTD.  
PA

Kato I, Izu H, Asada K;  
PI

WPI; 2001-343623/36.  
DR

String, tape or disk shaped bases with several different immobilized  
PT ligands including nucleic acids, sugars, peptides and proteins.

Example 1; Page 37; 56pp; Japanese.  
XX

The present invention describes bases in the shape of a string, tape or  
CC circular disc on the surface of which a plural number of different  
CC ligands are immobilised respectively in pre-determined domains. Also  
CC described are devices for detecting the binding between the ligands and  
CC receptors and methods for detection using these bases. The methods are  
CC useful for detection in biochemical and diagnostic assays. The ligands  
CC are immobilised in line, so the user only needs to determine the presence  
CC or absence of receptor binding, without further processing. AAH41754 to  
CC AAH41815 represent primers which are used in an example from the present  
CC invention  
XX  
SQ

Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1236 ACACCTTCATCTTCGGATCT 1255  
| | | | | | | | | | | | | | | | | | | | | |  
DB 1 AAAGTTTCATCTTCGGATCT 20

## RESULT 1828

AAH23850/C  
ID AAH23850 standard; DNA; 20 BP.

AAH23850;  
AC

07-AUG-2001 (first entry)  
DT

Human antileukoprotease (ALP) reverse PCR primer, SEQ ID NO:4.  
DE

Antileukoprotease; ALP; secretory leukocyte proteinase; SLP; human;  
KM cancer marker; ovarian tumour; ovarian-derived metastatic tumour;  
KM overexpression; low malignant potential tumour; ovarian carcinoma;  
KM serous carcinoma; mucinous carcinoma; endometrioid carcinoma;  
KM clear cell carcinoma; cancer; diagnosis; cytostatic;  
KM quantitative PCR primer; ss.  
XX  
XX  
XX

Homo sapiens.  
OS

XX

PN WO200128500-A2.  
XX  
PD 26-APR-2001.  
XX  
PF 18-OCT-2000; 2000WO-US041306.  
XX  
PR 18-OCT-1999; 99US-0159972P.  
XX  
PA (UYAR-) UNIV ARKANSAS.  
XX  
PI O'Brien TV, Tanimoto H, Underwood LJ, Shigemasa K;  
XX WPI, 2001-290812/30.  
DR  
XX  
PT Detecting tumor growth in an individual, particularly ovarian and ovarian  
PT derived metastatic tumors, comprises measuring antileukoprotease levels.  
XX  
PS Example 3; Page 10; 45pp; English.  
XX  
CC The invention relates to methods for the diagnosis and treatment of  
CC ovarian tumours or ovarian-derived metastatic tumours in an individual.  
CC The diagnostic method involves measuring the level of antileukoprotease  
CC (ALP) in a sample (e.g., a blood sample, tissue biopsy or ovarian  
CC secretion) from an individual. If the level of ALP exceeds the mean basal  
CC level of ALP in non-diseased individuals by 2 or more standard  
CC deviations, the individual is likely to have an ovarian or ovarian-  
CC derived tumour. ALP, also known as secretory leukocyte proteinase (SLPI),  
CC is a small (approximately 100 amino acids) secreted protease inhibitor  
CC which specifically inhibits the activity of stratum corneum chymotryptic  
CC enzyme, and is also able to inhibit leukocyte elastase, cathepsin G,  
CC chymotrypsin and trypsin. It is significantly overexpressed in carcinomas  
CC and potential tumours of ovarian origin. The invention also provides  
CC methods of treating ovarian or ovarian-derived tumours, or preventing  
CC ovarian tumour metastasis, via the administration of ALP. Methods of the  
CC invention are useful for the diagnosis, prevention and treatment of  
CC ovarian and ovarian-derived metastatic tumours, particularly low  
CC malignant potential tumours or ovarian carcinomas such as serous carcinoma,  
CC mucinous carcinoma, endometrioid carcinoma and clear cell carcinoma.  
CC Sequences AAH23847-AAH23850 represent PCR primers used in quantitative  
CC PCR in an exemplification of the invention to determine levels of ALP  
CC mRNA from normal and cancerous ovarian tissue  
XX  
SQ Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
XX  
QY 1109 CCCCTGACATCCGCTTGGG 1128  
DB 20 CCACGTATATCTCTCTTGG 1  
XX  
RESULT 1829  
AAC62058  
ID AAC62058 standard; DNA; 20 BP.  
XX  
AC AAC62058;  
XX  
DT 06-MAR-2001 (first entry)  
XX  
DB PCR primer for nucleic acids encoding the human EAA5 receptor.  
XX  
XX Human; excitatory amino acid 4 receptor; EAA 4 receptor;  
XX central nervous system receptor; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX US6136544-A.  
XX  
XX 24-OCT-2000.  
XX  
XX 20-JUN-1996; 96US-00666221.  
XX  
XX

XX 23-DEC-1993; 93US-00172188.  
PR 21-DEC-1994; 94WO-CA000705.  
XX  
XX (ALIX ) ALLELIX BIOPHARMACEUTICALS INC.  
XX  
XX Nutt S, Kamboj R;  
XX  
XX WPI, 2001-048927/06.  
DR  
XX  
PT Isolated unedited human excitatory amino acid 4 receptor polynucleotides  
PT and proteins, useful for screening potential therapeutic compounds and  
PT drug candidates that interact with edited human central nervous system  
PT receptor forms.  
XX  
PS Example 8; Col 21; 91pp; English.  
XX  
XX PCR primers AAC62056-60 were used to amplify nucleic acids encoding the  
XX human excitatory amino acid (EAA) 5 receptor. The synthesis this central  
XX nervous system (CNS) receptor in vivo is regulated by a single human CNS  
XX mechanism. This editing results in the expression from a single human CNS  
XX receptor gene of structurally distinct forms of the CNS receptor protein.  
XX The specification describes a human EAA4 receptor. The human excitatory  
XX EAA4 receptor polynucleotide and the protein it encodes are useful for  
XX screening potential therapeutic compounds and selecting drug candidates  
XX that interact selectively with edited human central nervous system  
XX receptor forms  
XX  
SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
XX  
QY 1211 CCGGCTCCAGCGTGGAGAA 1230  
DB 1 CTGGCTCCGAGGTGTGAA 20  
XX  
RESULT 1830  
AAD04717/c  
ID AAD04717 standard; DNA; 20 BP.  
XX  
AC AAD04717;  
XX  
DT 04-JUL-2001 (first entry)  
XX  
DB Mouse P16beta cDNA amplifying P16-specific reverse PCR primer.  
XX  
XX Mouse; multiple tumour suppressor; MTS; cytoskeletal; somatic mutation;  
XX germ line mutation; gene therapy; melanoma; leukemia; astrocytoma; CLL;  
XX glioblastoma; lymphoma; glioma; Hodgkin's lymphoma; cancer; rectum; P16;  
XX pancreas; breast; thyroid; ovary; uterus; testis; kidney; stomach; mouse;  
XX P16beta; PCR primer; ss.  
XX  
XX Mus sp.  
XX  
XX US6218146-B1.  
XX  
XX 17-APR-2001.  
XX  
XX 22-JUL-1998; 98US-00120131.  
XX  
XX 18-MAR-1994; 94US-00214582.  
PR 18-MAR-1994; 94US-00215086.  
PR 18-MAR-1994; 94US-00215087.  
PR 14-APR-1994; 94US-00227369.  
PR 01-JUN-1994; 94US-00251938.  
PR 17-MAR-1995; 95WO-US0003316.  
PR 07-JUN-1995; 95US-00486047.  
XX  
XX (MYRI-) MYRIAD GENETICS INC.  
XX  
XX

```
PI      Kamb A;
XX
XX      WPI; 2001-289831/30.
DR
PT      Novel multiple tumor suppressor proteins useful for diagnosis and
XX      prognosis of human cancer and for screening drugs for cancer treatment.
PS      Example 12; Col 50; 71pp; English.
XX
XX      The invention relates to somatic and germ line mutations in the multiple
CC      tumor suppressor (MTS) gene in human cancer. The invention also relates
CC      to therapy of human cancer which have a mutation in the MTS gene,
CC      including gene therapy, protein replacement therapy, and protein
CC      mimetics. The MTS sequences are useful for diagnosing predisposition to
CC      human cancer or for diagnosing and prognosing human cancers such as
CC      melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioma,
CC      Hodgkin's lymphoma, CLL and cancers of pancreas, breast, thyroid, ovary,
CC      uterus, testis, kidney, stomach and rectum. They are also used for
CC      screening drugs for cancer treatment. The present sequence is p16-
CC      specific reverse PCR primer used for amplifying mouse p16beta cDNA
XX
SQ      Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY      505 GAGGCTTACTGTGAGAGCT 524
DB      20 GAAGGCTTCTGACACGCT 1
RESULT 1831
AAH48603/c
ID      AAH48603 standard; DNA; 20 BP.
XX
AC      AAH48603;
XX
DT      20-SEP-2001 (first entry)
XX
XX      Human fascin associated primer SEQ ID 55.
DE
XX      Fascin; regulatory sequence; human; dendritic cell; antiviral; tumor;
KW      antibacterial; antifungal; antiparasitic; anti-allergic; neurological;
KW      immunomodulatory; apoptotic; expression regulator; vaccine; allergen;
KW      Creutzfeld-Jakob disease; Alzheimer's disease; gene therapy;
KW      autoimmune disease; transplant rejection; primer; ss.
XX
OS      Homo sapiens.
XX
PN      WO200151631-A2.
XX
PD      19-JUL-2001.
XX
PF      12-JAN-2001; 2001WO-EP000362.
XX
PR      13-JAN-2000; 2000DE-01001169.
PR      02-MAR-2000; 2000DE-01010188.
XX
XX      (RESK/) RESKE-KUNZ A.
PA      (ROSS/) ROSS X.
PA      (ROSS/) ROSS R.
PA      (BROS/) BROS M.
XX
XX      Reske-Kunz A, Ross X, Ross R, Bros M;
PI      WPI; 2001-451858/48.
DR
XX      New regulatory sequences from the fascin gene, useful for providing
PT      dendritic cell-specific expression of e.g. antigens, e.g. for vaccination
PT      against tumors and infections.
XX
PS      Claim 2b; Page 109; 117pp; German.
```

```
XX
CC      This invention describes novel regulatory sequences (A) derived from
CC      human fascin that provide specific expression in dendritic cells (DC) and
CC      which have antiviral, antibacterial, antifungal, antiparasitic, anti-
CC      allergic, neurological, immunomodulatory and apoptotic activity. (A) are
CC      used to regulate expression of antigens, immunoregulators, antisense
CC      sequences etc. in DC-specific fashion. Recombinant DNA, vectors and host
CC      cells that contain (A) are useful: (i) in vaccines against viruses,
CC      bacteria, fungi, parasites, tumors, allergens and plaques in Creutzfeld-
CC      Jakob and Alzheimer's disease; and (ii) for gene therapy of tumors,
CC      allergies, infections, autoimmune diseases and transplant rejection. They
CC      can also be provide specific expression of cell factors and cis-elements
CC      in DC; for isolation and identification of cell factors and cis-elements
CC      from regulatory sequences that mediate DC-specific expression; to
CC      determine the degree of maturity of DC and to block transcription
CC      factors, by providing binding sites in DC. (A) provide DC-specific
CC      expression of nucleic acid under their control, allowing a more specific
CC      regulation of the immune response and eliminating the long and laborious
CC      purification of DC (since a complete leucocyte population may be
CC      transformed), including transformation in vitro. This sequence represents
CC      a primer associated with the human fascin gene described in the invention
XX
SQ      Sequence 20 BP; 1 A; 10 C; 5 G; 4 T; 0 U; 0 Other;
Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY      1631 CCAGGAGCGAGCGCTGAG 1650
DB      20 CCAGGAGCGAGGCTGCAG 1
RESULT 1832
AAH54442
ID      AAH54442 standard; cDNA; 20 BP.
XX
AC      AAH54442;
XX
DT      11-APR-2001 (first entry)
XX
XX      Primer for amplifying 11-cis retinol dehydrogenase (RDH5).
DE
XX      11-cis retinol dehydrogenase; RDH5; eye; mutant; mutation;
KW      ocular disease; fundus albinopunctatus; retinitis punctata albescens;
KW      albinopunctate dystrophy; retinitis pigmentosa; human; primer; ss.
XX
OS      Homo sapiens.
XX
PN      WO200068364-A2.
XX
PD      16-NOV-2000.
XX
PF      08-MAY-2000; 2000WO-US012527.
XX
PR      06-MAY-1999; 99US-00306538.
XX
XX      (LUDW-) LUDWIG INST CANCER RES.
PA      (HARD) HARVARD COLLEGE.
PA      (MASS-) MASSACHUSETTS EYE & EAR INFIRMARY.
XX
XX      Simon A, Eriksson U, Dryja TP, Berson EL, Yamamoto H;
PI      WPI; 2001-016091/02.
DR
XX      Mutations in nucleic acid molecules encoding 11-cis retinol dehydrogenase
PT      correlated to ocular disorders, useful in diagnosis and treatment of
PT      diseases such as fundus albinopunctatus.
XX
XX      Example 1; Page 7; 28pp; English.
XX
XX      A new protein is described which comprises the 318 residue amino acid
CC      sequence corresponding to wild type retinol dehydrogenase (RDH5), but
```



```
DT 25-SEP-2001 (first entry)
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX FH modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX
XX US6255046-B1.
XX
XX 03-JUL-2001.
XX
XX 30-OCT-1998; 98US-00183846.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI, 2001-424617/45.
XX
XX Screening for agents which inhibit the activity of the oncogenic
XX phosphoglucosaminidase isozyme-2.
XX
XX Example 4; Col 9; 29pp; English.
XX
XX The present invention relates to a method for screening a candidate
XX therapeutic agent that inhibits kinase enzymatic activity of
XX phosphofructokinase isozyme (iPFK-2). Phosphofructokinase catalyses the
XX formation of fructose 2,6-bisphosphate from fructose-6-phosphate. The
XX method is used for identifying compounds that may be used to inhibit iPFK
XX -2 activity, an enzyme that is over-expressed by cancerous cells. iPFK-2
XX is useful as diagnostic targets, drug screening targets and as antisense
XX compounds that inhibit inflammation, cachexia and its translation in
XX cellular cytosol as an anti-tumour treatment. The present sequence is
XX human phosphofructokinase isozyme (iPFK-2) DNA specific phosphorothioate
XX sense oligonucleotide (S-iPFK-2) used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1679 CCACTACATCTTCCTGCT 1698
XX DB 20 CCAACGCGATCTTCGCGGCT 1
XX
XX RESULT 1836
XX AAD11920
XX ID AAD11920 standard; DNA; 20 BP.
XX
XX AC AAD11920;
XX
XX DT 25-SEP-2001 (first entry)
XX
XX DE Human iPFK-2 DNA specific phosphorothioate antisense oligonucleotide #1.
XX
XX XX Human; phosphofructokinase isozyme-2; iPFK-2; therapy; drug screening;
XX cancer; inflammation; cachexia; anti-tumour; phosphorothioate backbone;
XX ss.
```

```
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX FH modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX
XX US6255046-B1.
XX
XX 03-JUL-2001.
XX
XX 30-OCT-1998; 98US-00183846.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI, 2001-424617/45.
XX
XX Screening for agents which inhibit the activity of the oncogenic
XX phosphoglucosaminidase isozyme-2.
XX
XX Example 4; Col 9; 29pp; English.
XX
XX The present invention relates to a method for screening a candidate
XX therapeutic agent that inhibits kinase enzymatic activity of
XX phosphofructokinase isozyme (iPFK-2). Phosphofructokinase catalyses the
XX formation of fructose 2,6-bisphosphate from fructose-6-phosphate. The
XX method is used for identifying compounds that may be used to inhibit iPFK
XX -2 activity, an enzyme that is over-expressed by cancerous cells. iPFK-2
XX is useful as diagnostic targets, drug screening targets and as antisense
XX compounds that inhibit inflammation, cachexia and its translation in
XX cellular cytosol as an anti-tumour treatment. The present sequence is
XX human phosphofructokinase isozyme (iPFK-2) DNA specific phosphorothioate
XX antisense oligonucleotide (AS-iPFK-2) used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1679 CCACTACATCTTCCTGCT 1698
XX DB 1 CCAACGCGATCTTCGCGGCT 20
XX
XX RESULT 1837
XX AAF74084
XX ID AAF74084 standard; DNA; 20 BP.
XX
XX AC AAF74084;
XX
XX DT 30-APR-2001 (first entry)
XX
XX DE Primer #18.
XX
XX XX Solute carrier family 6 neurotransmitter transporter; seotonin 4; SLC6AA;
XX genotyping; allele specific oligonucleotide; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200109161-A1.
XX
XX PD 08-FEB-2001.
XX
XX PF 31-JUL-2000; 2000WO-US020638.
```

```
XX 29-JUL-1999; 99US-0146290P.
PR (GENA-) GENAISSANCE PHARM INC.
XX
XX Denton RR, Duda A, Nandabalan K, Sanchis A, Stephens JC;
XX WPI; 2001-123317/13.
DR
XX New isolated polynucleotide comprising a polymorphic variant for the
PT solute carrier family 6 neurotransmitter transporter, serotonin member 4
PT gene for identifying drugs for treating disorders related to expression
PT of the protein.
XX
XX Example 1; Page 33; 152pp; English.
PS
XX The present invention relates to a polymorphic variant of a reference
CC sequence for the solute carrier family 6 neurotransmitter transporter,
CC serotonin member 4 (SLC6A4) gene or a fragment of it or a sequence
CC complementary to the first sequence. The invention is used in producing a
CC recombinant organism that can be used to express SLC6A4 for protein
CC structure analysis and binding studies. A composition comprising a
CC genotyping oligonucleotide is used to detect a polymorphism in the SLC6A4
CC gene
CC
XX Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 217 GGCTCGATGAGAGTGTGG 236
Db 1 GGCTCGATGAGTGTCTGG 20
RESULT 1838
AAF85418/c
ID AAF85418 standard; DNA; 20 BP.
XX
XX AAF85418;
AC
XX
XX 23-JUL-2001 (first entry)
DT
XX
XX Primer used to amplify cDNA encoding rat mu-subtype opiate receptor.
DE
XX mu-subtype opioid receptor; G protein; opioid; drug addiction;
KM
XX PCR primer; ss.
KM
XX Rattus rattus.
OS
XX
XX US6225080-B1.
PN
XX
XX 01-MAY-2001.
PD
XX
XX 28-APR-1995; 95US-00430286.
PF
XX
XX 23-MAR-1992; 92US-00855286.
PR
XX 26-FEB-1993; 93US-00026140.
PR
XX 11-JUN-1993; 93US-00075447.
XX
XX (UHLG/) UHL G R.
PA (EPPL/) EPPLER C M.
PA (WANG/) WANG J.
XX
XX Uhl GR, Eppler CM, Wang J;
PI
XX
XX WPI; 2001-342395/36.
DR
XX
XX Novel isolated DNA encoding mu-subtype opioid receptor protein which is
PT useful for identifying other receptor subtypes, screening for mu opioid
PT ligands and for understanding mechanisms of opioid action.
XX
```

```
PS Example; Col 10; 51pp; English.
XX
XX PCR primer used to amplify cDNA encoding a rat mu-subtype opioid
CC receptor. The polynucleotide sequence is useful for producing a mu-type
CC opioid receptor by standard recombinant techniques. The encoded protein
CC is useful for producing monoclonal or polyclonal anti-receptor antibodies
CC and to identify patterns of post-translational modifications and to
CC elucidate associated G proteins. Mu receptor polynucleotides and
CC polypeptides are useful in identifying other receptor subtypes, in
CC screening for new opioid ligands and for understanding mechanisms of
CC opioid action e.g., drug addiction
CC
XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 849 CCTGACAGAGCCTGAAAC 868
Db 20 CCTGACGAGAACTTCAAGC 1
RESULT 1839
AAH49228/c
ID AAH49228 standard; DNA; 20 BP.
XX
XX AAH49228;
AC
XX
XX 26-NOV-2001 (first entry)
DT
XX
XX Anti-ICAM oligonucleotide XXI.
DE
XX
XX Polyamide-oligonucleotide derivative; anticancer; antiproliferative;
KW antiviral; hepatotropic; vasotropic; antisense inhibition; ribozyme;
KW integrin; cell-cell adhesion; cancer; restenosis; stability; PNA;
KW peptide nucleic acid; ss.
KW
XX
XX Synthetic.
OS
XX
XX EP1113021-A2.
PN
XX
XX 04-JUL-2001.
PD
XX
XX 08-MAR-1995; 2001EP-00104012.
PF
XX
XX 14-MAR-1994; 94DE-04408528.
PR
XX 08-MAR-1995; 95EP-00103332.
XX
XX (AVET ) AVENTIS PHARMA DEUT GMBH.
PA
XX
XX Uhlmann E, Breipohl G;
PI
XX
XX WPI; 2001-591267/67.
DR
XX
XX New DNA-peptide nucleic acid chimeras, useful e.g. as antisense agents
PT for treating e.g. cancer, also as diagnostic probes and primers.
PT
XX
XX Disclosure; Page 24; 54pp; German.
PS
XX
XX This invention describes novel polyamide-oligonucleotide derivatives (I)
CC and their physiologically acceptable salts of formula F((DNA)-Li) q(PNA-
CC Li) r(DNA-Li) s(PNA) t) xr, where q, r, s, t = 0 or 1, with the sum of
CC two or more adjacent letters at least 2; x = 1-20; DNA = nucleic acid
CC (such as DNA or RNA or their known derivatives); Li = covalent linkage
CC between DNA and PNA, i.e. a bond or a residue containing at least one
CC atom of carbon, nitrogen, oxygen or sulfur; PNA = polyamide structure
CC containing at least one nucleobase different from thymine; and F, F' =
CC end groups and/or are connected through a covalent bond. The products of
CC the invention have anticancer, antiproliferative, antiviral, hepatotropic
CC and vasotropic activity and can be used for the inhibition of gene
CC expression by antisense, ribozyme, sense, or triple-helix methods, or by
CC binding to proteins (aptamers). (I) are used for treating diseases caused
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by viruses (human immune deficiency, herpes simplex, influenza, vesicular stomatitis, hepatitis B or papilloma), or mediated by integrating or cell-cell adhesion reactions, for treating cancer, or for inhibiting in retestosis, particularly as antisense reagents. They are also useful in heterogeneous or homogeneous assays, as primers or probes, particularly where the target is amplified before being detected by hybridization, for the diagnosis of genetic, malignant or pathogen-related diseases. (1) retain the increased affinity for complementary strands and better stability in serum, associated with conventional peptide nucleic acids (PNA), but lack the disadvantages, i.e. have improved cellular uptake, do not aggregate in aqueous solution, and have reduced affinity for purification materials, reduced cytotoxicity, better sequence specificity. They are more active than either DNA or PNA oligomers. When used as probes, (1) show different responses to base-pair mismatches in the DNA and PNA segments, allowing better discrimination between pathogenic and non-pathogenic conditions such as the transition from proto-oncogene to oncogene, also, when used as primers, with the PNA segment at the 5'-end, they produce amplicons resistant to 5'-exonuclease, allowing this enzyme to be used to eliminate RNA or DNA primers. The DNA component allows additional reactions not possible with PNA alone, e.g. 3'-tailing and (1) may be incorporated into a gene. AAH49208-AAH49264 represent oligonucleotides used to illustrate the method of the invention

Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGGTGTGTGGCGG 245  
DB 20 GAGAGGGGAGAGTGTGTGGCGG 1

RESULT 1840  
AAF87785/C  
ID AAF87785 standard; DNA; 20 BP.

AC AAF87785;  
DT 11-JUL-2001 (first entry)

DE DNA 20-mer ASO (antisense DNA oligomer) SEQ ID NO:12.

KW Antisense DNA oligomer; ASO; identification; gene therapy; target;  
KW Nearest-Neighbour Thermal Stability Program; thermal melting temperature;  
KW phosphorothioate; disease treatment; DNA:RNA hybrid; ss.

OS Synthetic.

PN US6183966-B1.

PD 06-FEB-2001.

PF 22-JAN-1999; 99US-00235614.

PR 07-OCT-1994; 94US-00320507.

PR 03-MAR-1997; 97US-00808474.

PA (TEXA ) UNIV TEXAS SYSTEM.

PI Gray DM, Clark CL;

DR WPI; 2001-280429/29.

Identifying a nucleic acid having a sequence capable of targeting a gene of interest, for identifying nucleic acids for gene therapy, comprises using the Nearest-Neighbor Thermal Stability Program.

Example 1; Col 21-22; 43pp; English.

The present invention describes a method for the identification of a nucleic acid having a sequence capable of targeting a gene of interest

comprises: (a) a first database having a list of stability values for independent combinations of N(x); (b) a computing unit having a means for inputting data comprising N(x), data list, defining a nucleic acid sequence of interest to be targeted to provide a second database; and (c) a program capable of processing the first and second database to N(x) comparison, and a stability value of a nucleic acid sequence capable of targeting the gene of interest. The method is useful for identifying a nucleic acid having a sequence capable of targeting a gene of interest. These nucleic acids are useful in gene therapy and disease treatment. The method may be used to obtain thermodynamic parameters for 20 combinations of nearest-neighbour base pairs of DNA:RNA hybrid sequences. The Nearest-Neighbour Thermal Stability Program can process data for use in calculating thermal melting temperatures for phosphorothioate DNA:RNA hybrids. The program can be readily extended to predict the most stable triplex-forming sequences, or antigenic oligomers. The present sequence represents a DNA 20-mer ASO (antisense DNA oligomer) sequence which is used in the exemplification of the present invention

Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGGTGTGTGGCGG 245  
DB 20 GAGAGGGGAGAGTGTGTGGCGG 1

RESULT 1841  
AAF87788/C  
ID AAF87788 standard; DNA; 20 BP.

AC AAF87788;

DT 11-JUL-2001 (first entry)

DE Human intracellular adhesion molecule 1 (ICAM-1) S-ASO SEQ ID NO:15.

KW Antisense DNA oligomer; ASO; identification; gene therapy; target;  
KW Nearest-Neighbour Thermal Stability Program; thermal melting temperature;  
KW phosphorothioate; disease treatment; DNA:RNA hybrid; human; ICAM-1;  
KW intracellular adhesion molecule 1; ss.

OS Homo sapiens.

PN US6183966-B1.

PD 06-FEB-2001.

PF 22-JAN-1999; 99US-00235614.

PR 07-OCT-1994; 94US-00320507.

PR 03-MAR-1997; 97US-00808474.

PA (TEXA ) UNIV TEXAS SYSTEM.

PI Gray DM, Clark CL;

DR WPI; 2001-280429/29.

Identifying a nucleic acid having a sequence capable of targeting a gene of interest, for identifying nucleic acids for gene therapy, comprises using the Nearest-Neighbor Thermal Stability Program.

Example 1; Col 25-26; 43pp; English.

The present invention describes a method for the identification of a nucleic acid having a sequence capable of targeting a gene of interest comprises: (a) a first database having a list of stability values for independent combinations of N(x); (b) a computing unit having a means for inputting data comprising N(x), data list, defining a nucleic acid sequence of interest to be targeted to provide a second database; and (c)



CC	a program capable of processing the first and second database to N(x)
CC	comparison, and a stability value of a nucleic acid sequence capable of
CC	targeting the gene of interest. The method is useful for identifying a
CC	nucleic acid having a sequence capable of targeting a gene of interest.
CC	These nucleic acids are useful in gene therapy and disease treatment. Th
CC	method may be used to obtain thermodynamic parameters for 20 combinatio
CC	of nearest-neighbor base pairs of DNA:RNA hybrid sequences. The Nearest
CC	Neighbor Thermal Stability Program can process data for use in
CC	calculating thermal melting temperatures for phosphorothioate DNA:RNA
CC	hybrids. The program can be readily extended to predict the most stable
CC	triplex-forming sequences, or antigene oligomers. The present sequence
CC	represents an antisense DNA oligomer designated S-ASO targeted to the
CC	human intracellular adhesion molecule 1 (ICAM-1), which is used in an
CC	example from the present invention
SQ	Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
Oy	Query Match 0.8%; Score 13.6; DB 1; Length 20; Best Local Similarity 80.0%; Pred. No. 1.1e+03; Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps
Dn	226 GAGAGTGTGTTGGTGCGG 245                20 GAGAGCGAAGTGTGGCG 1
RESULT 1842	
ID	AAS22310/c
XX	AAS22310 standard; DNA; 20 BP.
AC	AAS22310;
XX	
DT	24-OCT-2001 (first entry)
XX	
DE	Human COL9A2 PCR primer 1 for Exon 15.
XX	
KW	Human; collagen; COL1A1; COL1A2; COL9A1; COL9A2; COL9A3; ss;
KW	osteoporosis; multiple epiphyseal dysplasia; osteogenesis imperfecta;
KW	shortness of stature; low bone density; gene therapy; PCR primer.
XX	
OS	Homo sapiens.
XX	
PN	US6265157-B1.
PD	24-JUN-2001.
XX	
PF	03-OCT-1997; 97US-00943731.
XX	
PR	03-DEC-1991; 91US-00803628.
PR	13-MAR-1994; 94US-00212322.
XX	
PA	(UYAL-) UNIV ALLEGHENY HEALTH SCT.
PA	(UYUE-) UNIV JEFFERSON THOMAS.
PA	(UYUO-) UNIV OULU.
XX	
Pt	Prockop DJ, Spotila ID, Deltas CD, Sereda L;
Pt	Weisterhausen Larson A, Pack M, Colige A, Early J, Koerkhoe J;
Pt	Ala-Kokko L, Annunen S, Pihlajamaa T, Vuorisalo M, Paasilta P;
DR	WPI; 2001-432201/46.
XX	
PT	Detecting collagen gene alteration, useful for diagnosing osteoporosis,
PT	multiple epiphyseal dysplasia, osteogenesis imperfecta, shortness of
PT	stature and low bone density in humans.
XX	
PS	Claim 8; Fig 24; 617pp; English.
CC	The invention relates to Detecting a collagen gene alteration associated
CC	with a pathological condition in a human subject by obtaining from the
CC	subject a sample nucleic acid containing a portion of at least 15
CC	consecutive nucleotides of the segment of the COL1A gene extending in
CC	the 5' to 3' direction from 78 nucleotides of intion 27 located adjacent
CC	exon 28 through the 3' end of intion 51, where the portion contains an

CC	intronic nucleotide and a first and second site, determining the sequence
CC	of the portion and comparing the sequence of the portion with the
CC	corresponding consensus sequence of the COL1A1 gene where a difference
CC	between the sequence of the portion and the consensus sequence indicates
CC	the presence of the collagen alteration in the subject. The method is
CC	used for detecting abnormalities in a COL1 or COL3 gene is useful for
CC	determining whether a subject is afflicted with pathological conditions
CC	associated with an altered collagen gene such as osteoporosis, multiple
CC	epiphyseal dysplasia, osteogenesis imperfecta, shortness of stature and
CC	low bone density. Identification of an abnormality in a collagen gene is
CC	also useful for designing a therapeutic nucleotide or gene therapy agent
CC	which can be administered to the subject to correct or alleviate the
CC	abnormality. The method is useful for detecting mutations in both the
CC	coding and non-coding sequences of any of the COL1 or COL3 genes.
CC	Therefore the method can be used to detect collagen gene alterations
CC	which affect either the primary sequence of a collagen protein chain,
CC	splicing of the mRNA encoding such chains or regulation of expression of
CC	the genes encoding such chains. The present sequence is a PCR primer
CC	which amplifies a nucleic acid from a collagen gene of the invention
XX	
SQ	Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
QY	
Query Match	0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity	80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative	0; Mismatches 4; Indels 0; Gaps 0;
Db	
1632 CAGCAGGCGACGGCTGGAGG 1631	
20 CAGAAAGGAGCTCTGGAGG 1	
RESULT 1843	
ABK12803/c	
ID ABK12803 standard; DNA; 20 BP.	
XX	
AC ABK12803;	
XX	
DT 18-JUN-2002 (first entry)	
XX	
DE Intracellular-adhesion molecule, ICM, oligonucleotide.	
XX	
KW VP22; viral protein 22; ss; cytosstatic; antiposoriatic; dermatological;	
KM diagnosingagent; agent; Aluminum phthalocyanine; cell proliferation;	
KW apoptosis; psoriasis; eczema; skin cancer; restenosis; scarring;	
KW Intracellular-adhesion molecule; ICM.	
XX	
OS Unidentified.	
XX	
FH Key Location/Qualifiers	
FT modified_base 1..20	
FT **tag= a	
FT /label= OTHER	
FT /note= "Phosphorothioate backbone"	
FT modified_base 1	
FT /*tag= b	
FT /label= OTHER	
FT /note= "C is covalently linked to a fluorescein moiety"	
XX	
FN WO200220060-A1.	
XX	
PD 14-MAR-2002.	
XX	
PF 10-SEP-2001; 2001WO-GB004057.	
XX	
PR 08-SEP-2000; 2000GB-00022101.	
XX	
PA (PHOG-) PHOGEN LTD.	
XX	
PI O'hare PFJ, Brewis ND, Normand NM, Sunassee KR,	
XX	
DR WFI; 2002-304326/34.	
PT Use of aggregates comprising VP22 protein/polypeptide with the transport	

PT function of VP22 and oligonucleotides/polynucleotides with disaggregating  
PT agent, useful for treating or preventing cell proliferation.

PS Example 1; Page 17; 31pp; English.

XX  
XX  
XX The invention relates to the use of aggregates comprising VP22 (viral  
CC protein 22) protein (or a polypeptide with the transport function of  
CC VP22), and oligonucleotides or polynucleotides with a disaggregating  
CC agent e.g. Aluminium phthalocyanine (AlP) (simultaneously or sequentially)  
CC to treat target cells by delivering molecules to the cells and/or  
CC preventing cell proliferation and/or killing cells. Also included are a  
CC method of treating target cells to deliver molecules to the cells and/or  
CC prevent their proliferation and/or kill them comprising: (a) exposing the  
CC cells to the aggregate composition cited above; and (b) exposing the  
CC cells to the disaggregating agent cited above, which can promote  
CC disaggregation of the aggregate composition in cells, where steps (a) and  
CC (b) are carried out simultaneously or sequentially. A product comprising  
CC the aggregate composition and the disaggregating agent, as combined  
CC preparation for administration of these components, either sequentially  
CC or together, a pharmaceutical comprising the aggregate composition and  
CC the disaggregating agent, in combination with a pharmaceutical excipient  
CC and a cell preparation obtainable by treating the target cells in vitro  
CC as cited in the method above. The aggregate composition and  
CC disaggregating agent are useful in the manufacture of a medicament for  
CC treating diseases or target cells, and/or preventing cell proliferation  
CC and/or killing cells. These compositions, product or pharmaceutical are  
CC useful in therapy, particularly for manufacturing medicaments for use in  
CC therapy, or as a medicament for delivering molecules to cells to prevent  
CC cell proliferation or kill cells. In particular, these may be used for  
CC treating psoriasis, eczema, skin cancer, restenosis and scarring. The  
CC present sequence is an oligonucleotide encoding an intracellular-adhesion  
CC molecule, ICAM, which can form aggregates and is used to demonstrate the  
CC method of the invention

SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGCGG 245  
DB 20 GAGAGGGGAAAGTGTGTGGGG 1  
||||| ||| ||| ||| |||

RESULT 1844  
ABLO1636/C  
ID ABL01636 standard; DNA; 20 BP.

XX ABL01636;

DT 15-MAR-2002 (first entry)

XX ICAM-1 targeted antisense peptide nucleic acid SEQ ID NO: 42.

XX Peptide nucleic acid; PNA; cytosstatic; virucide; dermatological;  
KW antiaslomatic; overexpression; viral infection; vitiligo; antisense;  
KW pigmentation disorder; asthma; polyamide backbone; ss.

XX Unidentified.

OS  
XX  
XX Key Location/Qualifiers  
FH 1. 20  
FT /tag= a  
FT /note= "This sequence is a peptide nucleic acid, i.e. it  
FT contains a polyamide backbone instead of a deoxyribose  
FT backbone"

PT modified\_base 1  
PT /tag= b  
PT /mod\_base= OTHER  
PT /note= "linked to one of the peptides shown in ABB04517  
PT and ABB04518 to form a PNA-peptide conjugate"

XX

PN WO200179216-A2.

XX 25-OCT-2001.

XX 07-APR-2001; 2001WO-EP004030.

XX 18-APR-2000; 2000DE-01019135.

XX (AVET ) AVENTIS PHARMA DEUT GMBH.

XX Uhlmann E, Breipohl G, Wall DW;

XX WPI; 2002-075055/10.

PT New peptide nucleic acid derivatives, useful e.g. for tumor treatment and  
PT diagnosis, contain terminal, deprotonizable phosphoryl groups for e.g.  
PT improved solubility.

PS Disclosure; Page 22; 93pp; German.

XX The present invention relates to peptide nucleic acid (PNA) derivatives  
CC having at the C'- and optionally N'-terminus one or more phosphoryl  
CC groups, at least one of which contains one or more deprotonisable groups,  
CC preferably hydroxy or mercapto. These PNAs are useful in the treatment of  
CC tumours or any disease associated with (over)expression of particular  
CC genes, including viral infections, vitiligo or other pigmentation  
CC disorders, and asthma. The present sequence is a peptide nucleic acid  
CC described in the exemplification of the invention

XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGCGG 245  
DB 20 GAGAGGGGAAAGTGTGTGGGG 1  
||||| ||| ||| ||| |||

RESULT 1845  
ABK86419  
ID ABK86419 standard; DNA; 20 BP.

XX ABK86419;

DT 07-AUG-2003 (revised)

DT 26-AUG-2002 (first entry)

XX HHV4a nuclear protein EBNA2 forward real time PCR primer.

XX Human herpes virus infection; ss; real time PCR; primer; HHV1; HHV2;  
KW HHV3; HHV4; HHV5; HHV6; HHV7; HHV8; latent membrane protein-1; LMP-1;  
KW nuclear protein EBNA2; intermediate early protein; IE; glycoprotein B;  
KW KI glycoprotein.

XX Human herpesvirus 4.

XX WO200234953-A2.

XX 02-MAY-2002.

XX 12-OCT-2001; 2001WO-US031892.

XX 24-OCT-2000; 2000US-0242903P.

XX (HARR) HARRIS R B.

XX Harris RB, Reynolds TR;

XX WPI; 2002-463369/49.

PT Detecting infection of human herpes virus type or strain by informatic

PT analysis of gene sequence using probe and primers capable of directing  
PT amplification of target sequence and interpolating the virus.  
PS Claim 18; Page 35; 67pp; English.  
XX  
XX  
CC The invention relates to detecting (M1) infection by human herpes virus  
CC (HHV) by performing informatics analysis of gene sequences from different  
CC HHV types or strains (e.g. HHV1-HHV8) to identify target segment (TS),  
CC selecting probe and primers capable of directing amplification,  
CC amplifying TS, interpolating HHV number by comparing number of  
CC amplification cycles (NAC) for detecting TS to NAC to detect known  
CC quantity of TS. Also included are cloning a segment of genomic viral DNA  
CC from the identified TS (M2), a polynucleotide (I) molecule having any one  
CC of 61 nucleotide sequences appearing as ABK6401-ABK6461, a vector  
CC comprising a fragment of a gene that encodes an HHV1 thymidine kinase  
CC protein, HHV2 thymidine kinase protein, a thymidine kinase protein from a  
CC drug-resistant HHV2, thymidine kinase protein from a drug-resistant HHV1  
CC or a drug resistant HHV2, HHV3 thymidine kinase protein, HHV4 latent  
CC membrane protein-1 or an HHV4b latent membrane protein-1, an HHV4  
CC nuclear protein EBNA2, HHV4b nuclear protein EBNA2, an HHV5 intermediate  
CC early protein, HHV6a glycoprotein B or an HHV6b glycoprotein B, an HHV6a  
CC intermediate early protein, HHV6b intermediate early protein, an HHV7  
CC glycoprotein B, and an HHV8 K1 glycoprotein (i.e. the target sequences),  
CC and a fluorogenic probe with a fluorescent reporter group covalently  
CC attached to the probe, and a fluorescence quencher group covalently  
CC attached to the probe. (M1) is useful for detecting infection by a  
CC particular type or a strain of HHV in a sample from an individual  
CC suspected of having HHV. (M2) is useful for cloning (M2) a segment of  
CC genomic HHV viral DNA. (M1) is useful for creating a screening platform  
CC to analyse the effectiveness of pharmaceuticals by measuring the ability  
CC of anti-viral agents to mediate HHV propagation. (M1) allows accurate and  
CC sensitive diagnosis of HHV infection in patients. Unlike conventional  
CC procedures, infection by one strain of a specific type of HHV can be  
CC distinguished from infection by another strain of the same HHV type. The  
CC method allows detection of infection by HHV that cannot be detected by  
CC conventional PCR approaches. In addition to determining specific activity  
CC of anti-viral agents, purification of promising anti-viral agents can  
CC also be tracked, thus circumvents problems endemic to ex vivo testing,  
CC such as drug toxicity and side effects. (M1) is also applied to HHV  
CC strains for which complete sequence data is unavailable. The present  
CC sequence is the HHV4a nuclear protein EBNA2 forward real time PCR primer.  
CC (Updated on 07-AUG-2003 to correct OS field.)  
XX  
SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1542 GGCCAGCCTTCGGTCTTCGT 1561  
DB 1 GTCCAGTCTCCTCGTCTTCAT 20  
RESULT 1846  
AAD41528/c  
ID AAD41528 standard; DNA; 20 BP.  
XX  
AC AAD41528;  
XX  
DT 30-OCT-2002 (first entry)  
XX  
DE Collagenase 1 gene specific reverse RT-PCR primer.  
XX  
XX Marker: vitamin D analogue; antiproliferative; cancer; osteodystrophy;  
XX multiple sclerosis; osteoporosis; osteomalacia; hyperparathyroidism;  
XX genoprotective; epidermal wound; chemoprotective; DNA repair mechanism;  
XX cyostatic; psoriasis; neuroprotective; vulnerrary; RT-PCR; primer; ss.  
OS Unidentified.  
XX  
XX  
XX WO200244403-A2.  
XX

PD 06-JUN-2002.  
XX  
XX  
PF 28-NOV-2001; 2001WO-CA001689.  
XX  
XX  
PR 29-NOV-2000; 2000US-0253746P.  
PR 02-MAY-2001; 2001US-0287729P.  
XX  
XX (UWMC-) UNIV MCGILL.  
PA  
PI White JH;  
XX WPI; 2002-537458/57.  
DR  
XX  
XX Novel marker for testing analogs of vitamin D expected to be effective in  
PT reducing aberrant activity of vitamin D-responsive cell, comprises gene  
PT pertinent to action of vitamin D for testing the analogs.  
PS Example 2; Page 48; 89pp; English.  
XX  
XX The invention relates to a marker for testing analogues of vitamin D  
CC expected to be effective in reducing aberrant activity of vitamin D-  
CC responsive cell, comprises at least one gene pertinent to the action of  
CC vitamin D for testing the analogues and determining analogues capable of  
CC regulating the gene, and is indicative of a chemopreventive or  
CC chemotherapeutic agent. The invention is useful for testing analogues of  
CC vitamin D expected to be effective in reducing aberrant activity of  
CC vitamin D-responsive cell or for testing analogues of vitamin D suspected  
CC to have antiproliferative activity. The invention is useful for reducing  
CC aberrant activity of vitamin D-responsive cell, and for treating a  
CC disorder characterised by an aberrant activity of vitamin D-responsive  
CC cell, where the disorder is selected from cancer, psoriasis, multiple  
CC sclerosis, osteoporosis, osteodystrophy, osteomalacia and  
CC hyperparathyroidism. The invention is useful for identifying regulated  
CC target genes correlated with the antiproliferative effect of vitamin D  
CC and its analogues. The invention is useful for protecting against in vivo  
CC DNA damage, for inducing in vivo DNA repair mechanisms in a mammal, or  
CC for reducing or preventing DNA damage to the skin of a mammal, preferably  
CC human. The invention is useful as a genoprotective or chemoprotective  
CC agent. The invention is useful as a marker for the activity of DNA repair  
CC mechanisms. The invention is useful for testing compounds susceptible of  
CC inhibiting an enzyme which metabolises 1,25-dihydroxyvitamin D3. The  
CC invention is useful for treating epidermal wounds. The present sequence  
CC is collagenase 1 gene specific RT-PCR primer  
XX  
SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 965 AGGTGCTACACGAGACCTC 984  
DB 20 ATGTGCTACACGAGATACCC 1  
RESULT 1847  
ABL58571  
ID ABL58571 standard; DNA; 20 BP.  
XX  
XX ABL58571;  
XX  
XX 26-JUN-2002 (first entry)  
XX  
XX ARF/HK3 protein related primer #1.  
DE  
XX HK3; housekeeping gene 33; ARF; tumour; PCR; primer; ss.  
XX  
XX Synthetic.  
XX  
XX WO200220770-A1.  
XX  
XX 14-MAR-2002.  
XX

PF 06-SEP-2001; 2001WO-JP007732.  
XX  
XX 08-SEP-2000; 2000JP-00274209.  
XX  
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.  
PA (NAHD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.  
XX  
XX Sugihara T, Wadhwa R, Kaul SC;  
XX  
XX WPI, 2002-393846/42.  
XX  
XX New isolated human or mouse targeting peptide useful for targeted  
PT delivery of therapeutic agents, for inhibiting angiogenesis, tumor growth  
PT or pregnancy, and for inducing apoptosis or weight loss.  
XX  
XX Example 6; Page 76; 81pp; Japanese.  
XX  
XX The invention relates to the screening of antitumor agents by using the  
CC interaction between ARF protein and HK33 (Housekeeping 33) protein.  
CC Nuclear transport of ARF protein is inhibited by the expression of HK33  
CC gene, and thus p53-dependent transcription is suppressed. In immortalised  
CC cells, moreover, the expression of HK33 gene is significantly elevated.  
CC The invention provides a method of screening an antitumor agent by using  
CC the interaction between ARF protein and HK33 protein. It also provides a  
CC method for utilisation of HK33 protein and a gene encoding it in the  
CC examination of tumour related disease. The current sequence represents a  
CC ARF/HK33 protein related primer  
XX  
XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1468 CTGGGGGAGCGGATCCACAA 1487  
DB 1 CTGGTGGAGCAGTCCAAAA 20  
RESULT 1848  
ABL52358/c  
ID ABL52358 standard; DNA; 20 BP.  
XX  
XX ABL52358;  
XX  
XX 15-JUL-2002 (first entry)  
XX  
XX Mouse FLIP-c chimeric phosphorothioate oligonucleotide SEQ ID NO:36.  
XX  
XX FLIP-c: caspase 8 dominant negative regulator; antiinflammatory;  
KM anti-tumour; FLIP-c inhibitor; apoptosis; antisense gene therapy;  
KM phosphorothioate; antisense modulation; infection; inflammation; tumour;  
XX ss.  
XX  
XX Mus musculus.  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FT modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "Chimeric phosphorothioate oligonucleotide having  
FT 2'-methoxyethyl (2'-MOE) wings"  
XX  
XX WO200224717-A1.  
XX  
XX 28-MAR-2002.  
XX  
XX 14-SEP-2001; 2001WO-US028732.  
XX  
XX 20-SEP-2000; 2000US-0066269.  
XX  
XX (ISIS-) ISIS PHARM INC.

XX  
XX Ackermann EJ, Bennett CF, Zhang H, Watt AT, Ricketts W, Dean NM;  
PI  
XX WPI, 2002-404948/43.  
XX  
XX Novel antisense compound that hybridizes and inhibits nucleic acid  
PT encoding a natural dominant negative regulator of caspase 8, FLIP-c,  
PT useful for preventing or delaying infection, inflammation or tumor  
PT formation.  
XX  
XX Claim 3; Page 99; 154pp; English.  
XX  
XX The present invention describes a compound (I) 8-50 nucleobases in length  
CC targeted to a nucleic acid molecule (II) encoding a natural dominant  
CC negative regulator of caspase 8, FLIP-c, where (II) specifically  
CC hybridises with and inhibits expression of the protein, or specifically  
CC hybridises with at least an 8-nucleobase portion of an active site on  
CC (II). (I) has antiinflammatory and anti-tumour activities. (I) is an  
CC inhibitor of FLIP-c expression, a modulator of apoptosis and can be used  
CC in antisense gene therapy. (I) is useful for inhibiting the expression of  
CC FLIP-c in cells or tissues, and for treating an animal having a disease  
CC or condition associated with FLIP-c. (I) is also useful for modulating  
CC apoptosis in a cell, where a caspase such as caspase 8, caspase 3 or  
CC caspase 7 is activated, and the FLIP-c is the long form of FLIP-c. (I) is  
CC also useful for diagnostics, therapeutics, prophylaxis, as research  
CC reagents and kits, for distinguishing functions of various members of a  
CC biological pathway, and in antisense gene therapy. (I) is also useful  
CC prophylactically, e.g., to prevent or delay infection, inflammation or  
CC tumour formation. The present sequence represents mouse FLIP-c inhibiting  
CC chimeric phosphorothioate oligonucleotide having 2'-methoxyethyl (2'-MOE)  
XX wings, which is used in an example from the present invention  
SQ  
Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;  
QY 661 TACAAAGCGCAAGCAAGCT 680  
DB 20 TACACAGCGAGGCAAGAT 1  
RESULT 1849  
ABQ74294  
ID ABQ74294 standard; DNA; 20 BP.  
XX  
XX ABQ74294;  
XX  
XX 14-OCT-2002 (first entry)  
XX  
XX Human leukocyte antigen DOB1 locus PCR primer DOB1-ex2F.  
XX  
XX Human leukocyte antigen, DOB1, DOA1; aspermatia; examination; detection;  
KM PCR primer; ss.  
XX  
XX Homo sapiens.  
OS  
XX JP2002153300-A.  
XX  
XX 28-MAY-2002.  
XX  
XX 24-NOV-2000; 2000JP-00358486.  
XX  
XX 24-NOV-2000; 2000JP-00358486.  
XX  
XX (INOK/) INOKO H.  
XX  
XX WPI, 2002-552748/59.  
XX  
XX Examination of aspermatia comprising investigating an allele with  
PT correlation to aspermatia if it is detected in the HLA-DOB1 locus.  
XX

PS Example 2; Page 4; 7pp; Japanese.

XX The present invention describes a method for the examination of asperma

CC in which, if an allele showing correlation to asperma is detected in the

CC human leukocyte antigen (HLA)-DQA1 locus, it is investigated. Also

CC described is a method for the examination of asperma in which one of the

CC following (a) to (e) is investigated: (a) if the base sequence of the DNA

CC corresponding to codon 64 of HLA-DQA1 gene is AGA; (b) if the base

CC sequence of the DNA corresponding to codon 66 of HLA-DQA1 gene is ATG;

CC (c) if the base sequence of the DNA corresponding to codon 68 of HLA-DQA1

CC gene is GTG; (d) if the base sequence of the DNA corresponding to codon

CC 69 of HLA-DQA1 gene is GTG; or (e) if the base sequence of the DNA

CC corresponding to codon 71 of HLA-DQA1 gene is GTG. The method is useful

CC for the examination of asperma. The present sequence represents a PCR

CC primer for the HLA-DQB1 locus, which is used in an example from the

CC present invention

SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

XX

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1427 TCTCCGCGAGAGATGCCATG 1446

DB 1 TCCCGCGAGAGATTTCGTG 20

RESULT 1850

AAS97894

ID AAS97894 standard; DNA; 20 BP.

XX AAS97894;

AC

XX 12-MAR-2002 (first entry)

DT

XX Human SACL gene-specific oligonucleotide PCR primer #45.

DE

XX Human; mouse; SACL; carbohydrate; sweetener; ethanol; alcoholism; ss;

XX obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;

KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;

KW protein replacement therapy.

XX

XX Homo sapiens.

OS

XX WO200183749-A2.

XX

XX 08-NOV-2001.

PD

XX 25-APR-2001; 2001WO-US013387.

XX

XX 28-APR-2000; 2000US-0200794P.

XX

XX 28-JUL-2000; 2000US-0221419P.

PR

XX 10-NOV-2000; 2000US-0247443P.

XX

XX (WARNER) WARNER LAMBERT CO.

PA

XX (MONE-) MONEILLI CHEM SENSES CENT.

XX

XX Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;

PI Ohnen JD, Reed DR, Ross D, Tordoff MG;

XX

XX WPI; 2002-075162/10.

XX

XX Novel isolated polypeptide comprising variant form of mouse or human SACL

XX polypeptide, and is associated with altered preference for carbohydrates

XX PT or other sweeteners, useful for preventing obesity, diabetes, alcoholism.

XX

XX Claim 14; Page 91; 239pp; English.

XX

XX The invention relates to an isolated polypeptide, comprising a variant

XX form of mouse or human SACL polypeptide. The variant form is associated

XX with altered preference for carbohydrates, other sweeteners or ethanol.

XX

XX The polypeptide and its associated DNA sequence can be produced by

CC recombinant techniques and is useful for preventing obesity, diabetes or

CC alcoholism associated with SACL expression. The sequences are useful in

CC screening for drugs and sweeteners. Recombinant cell lines and transgenic

CC embryos may be used in screening for and identifying agents that induce

CC or repress function of SACL. Predisposition to diabetes, obesity or

CC alcoholism can be ascertained by testing any fluid or tissue of a human

CC (such as blood, pancreas or tongue) for sequence variations of the SACL

CC gene. A sequence variation of the SACL locus may indicate a

CC predisposition to diabetes, obesity and/or alcoholism and may provide a

CC diagnostic mark. The polynucleotide can be detected in a biological

CC sample by contacting the DNA with a probe to form a hybridisation complex

CC which is then detected. The sequences represent cDNA encoding human and

CC mouse SACL polypeptides and PCR primers specific for the SACL genes

XX

SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

XX

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 851 TGGACAGAGACCTGAGCAG 870

DB 1 TGGAGTACGACCTGACCTG 20

RESULT 1851

ABL42954

ID ABL42954 standard; DNA; 20 BP.

XX ABL42954;

AC

XX 12-APR-2002 (first entry)

DT

XX Maturation/activation dendritic cell expression gene PCR primer #328.

DE

XX Human; maturation/activation dendritic cell expression gene; maturation;

KW activation; dendritic cell; PCR primer; ss.

KW

XX

XX Homo sapiens.

OS

XX Synthetic.

OS

XX JP2001327293-A.

XX

XX 27-NOV-2001.

PD

XX 22-MAY-2000; 2000JP-00150562.

XX

XX 22-MAY-2000; 2000JP-00150562.

XX

XX 22-MAY-2000; 2000JP-00150562.

PR

XX

XX (KAGA-) KAGAKU GIUTSU SHINKO JIGYODAN.

PA

XX

XX WPI; 2002-127070/17.

XX

XX Human maturation/activation dendritic cell expression gene group.

PT

XX

XX Disclosure; Page 39; 41pp; Japanese.

XX

XX The present invention describes a human maturation/activation dendritic

XX cell (DC) expression gene group consisting of 100 genes which show the

XX highest expression among the genes expressed in human maturation/

XX activation DC. Also described are: (1) a protein expressed by the above

XX human maturation/activation DC expression gene; (2) an antibody against

XX the protein; and (3) an antagonist against the expression of each gene

XX belonging to the above gene group. The gene group is useful for the

XX treatment and the diagnosis of various human diseases related to human

XX DC. ABL42927 to ABL42956 represent PCR primers for human maturation/

XX activation DC expression genes, which are used in the exemplification of

XX the present invention

XX

SQ Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;

XX

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

```
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 481 CTACGAGCTGACATCCGGCT 500
   |||||
Db 1 CTCACGCTGACCTCCACCT 20

RESULT 1852
ABK30510
ID ABK30510 standard; DNA; 20 BP.
XX
XX ABK30510;
AC
XX
XX
DT 23-APR-2002 (first entry)
XX
DE Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124842.
XX
XX Human; glioma-associated oncogene-1 associated disease; infection;
KW inflammation; tumour formation; cytostatic; antiinflammatory; antisense;
KW phosphorothioate; ss.
XX
XX Homo sapiens.
OS
XX
XX US6329203-B1.
PN
XX
XX 11-DEC-2001.
PD
XX
XX 08-SEP-2000; 2000US-00657042.
PF
XX
XX 08-SEP-2000; 2000US-00657042.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Bennett CF, Wyatt J;
PI
XX
XX WPI; 2002-138363/18.
DR
XX
XX Novel antisense compounds targeted to nucleic acids encoding glioma-
PT associated oncogene-1, for modulating the gene expression and treating
PT diseases associated with expression of the oncogene in humans.
XX
XX Claim 1; Col 44; 43pp; English.
PS
XX
XX The present invention relates to antisense compounds and methods for
CC modulating the expression of human glioma-associated oncogene-1. The
CC antisense compounds, particularly antisense oligonucleotides, target and
CC inhibit the expression of human glioma-associated oncogene-1. The
CC antisense compounds are useful for inhibiting the expression of human
CC glioma-associated oncogene-1 in human cells or tissues and for treating
CC an animal, particularly a human suspected of having or being prone to a
CC disease or condition associated with expression of glioma-associated
CC oncogene-1. The compounds are useful for diagnostics, therapeutics and as
CC research reagent, e.g. prophylactically to prevent or delay infection,
CC inflammation or tumour formation. The antisense compounds are safely and
CC effectively administered to humans. ABK30509-ABK30586 represent the
CC antisense oligonucleotides of the invention which comprise a
CC phosphorothioate backbone
XX
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 340 GACTTGAAGATGGGCTCTGA 359
   |||||
Db 1 GAGTGAACATGGCGTCTCA 20

RESULT 1853
ABK77759/C
ID ABK77759 standard; DNA; 20 BP.
XX
```

```
AC ABK77759;
XX
XX 13-DEC-2002 (first entry)
DT
XX
XX Angiogenesis inhibitory oligonucleotide #243.
DE
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubrosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
XX
XX Synthetic.
OS
XX
XX WO200253141-A2.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 14-DEC-2001; 2001WO-US048458.
PF
XX
XX 14-DEC-2000; 2000US-0255534P.
PR
XX
XX (COLE-) COLEY PHARM GROUP INC.
PA
XX
XX Bratzler RW;
PI
XX
XX WPI; 2002-566690/60.
DR
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
PT
XX
XX Claim 2; Page 23; 276pp; English.
PS
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubrosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention
XX
XX
SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTCAGCGCGCGCTCCGCTC 574
   |||||
Db 20 CCGCGCGCGCGCGCGCGCC 1

RESULT 1854
ABL39008/C
ID ABL39008 standard; DNA; 20 BP.
XX
XX ABL39008;
AC
XX
XX 16-APR-2002 (first entry)
DT
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 410.
DE
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
```

KM angiogenesis; metastasis; cytostatic; ss.  
XX Synthetic.  
OS  
XX WO200197843-A2.  
XX  
XX 27-DEC-2001.  
XX  
XX 22-JUN-2001; 2001WO-US020154.  
XX  
XX 22-JUN-2000; 2000US-0213346P.  
XX  
XX (IOWA ) UNIV IOWA RES FOUNO.  
XX  
XX Weiner G, Hartmann G;  
PI  
XX WPI; 2002-154611/20.  
XX  
XX  
XX Treating or preventing cancer, such as basal cell carcinoma, comprises  
PT administering immunostimulatory nucleic acids that induce expression of  
PT cell surface antigens and antibodies to a subject having or at risk of  
PT developing cancer.  
XX  
XX  
XX Disclosure; Page 199; 312pp; English.  
XX  
XX The present invention relates to methods for treating or preventing  
CC cancer, involving administering to a subject having or at risk of  
CC developing cancer immunostimulatory nucleic acids that induce expression  
CC of cell surface antigens and antibodies. The methods are useful for  
CC treating or preventing cancer such as basal cell carcinoma, bladder  
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
CC breast cancer, cervical cancer, colon and rectum cancer, connective  
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx  
CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present invention is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
XX  
SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 555 CCTCAGCGCGCGCTCCGTC 574  
Dn 20 CCGCGCGCGCGCGCGCGCC 1  
XX  
XX  
XX RESULT 1855  
AB565410  
ID AB565410 standard; DNA; 20 BP.  
XX  
XX  
XX AB565410;  
XX  
XX 15-NOV-2002 (first entry)  
XX  
XX Human/mouse Protein Phosphatase 2 antisense oligonucleotide #7.  
XX  
XX Human; mouse; Protein Phosphatase 2 catalytic subunit alpha; diabetes;  
XX cancer; infection; inflammation; tumour formation; cytostatic;  
XX antidiabetic; phosphorothioate; ss.  
XX  
XX Homo sapiens.  
OS  
XX Mus musculus.  
XX  
XX  
XX Key Location/Qualifiers  
FT 1..20  
FT /tag= a  
FT /mod base= OTHER  
FT /note= "OTHER= Phosphorothioate internucleotide linkages,"

FT bases 1-5 and 16-20 are 2'-methoxyethoxy (2'-MOE) bases.  
FT All cytidine bases are 5-methylcytidines"  
XX  
XX WO200264836-A1.  
XX  
XX 22-AUG-2002.  
XX  
XX  
XX 05-FEB-2002; 2002WO-US003848.  
XX  
XX 09-FEB-2001; 2001US-00780049.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Monia BP, Wyatt JR;  
PI  
XX WPI; 2002-657604/70.  
XX  
XX  
XX New antisense oligonucleotides targeted to nucleic acid encoding Protein  
PT Phosphatase 2 catalytic subunit alpha, useful in treating diseases  
PT associated with the aberrant expression of Protein Phosphatase 2  
PT catalytic subunit alpha.  
XX  
XX  
XX Claim 3; Page 94; 153pp; English.  
XX  
XX The present invention relates to antisense oligonucleotides and methods  
CC for modulating the expression of human or mouse Protein Phosphatase 2  
CC catalytic subunit alpha. The antisense oligonucleotides are useful for  
CC inhibiting the expression of Protein Phosphatase 2 catalytic subunit  
CC alpha and for treating diseases or conditions associated with aberrant  
CC expression of Protein Phosphatase 2 catalytic subunit alpha. Such  
CC diseases include diabetes and cancer. The antisense oligonucleotides are  
CC also useful for diagnostics, therapeutics, and prophylaxis, e.g. to  
CC prevent or delay infection, inflammation or tumour formation. They are  
CC also useful as research reagents for distinguishing between functions of  
CC various members of a biological pathway. AB565410-AB565477 represent  
CC human or mouse Protein Phosphatase 2 catalytic subunit alpha antisense  
CC oligonucleotides which comprise a phosphorothioate backbone  
XX  
XX  
SQ Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 51 AGCAGTGTACTGCTGTAAC 70  
Dn 1 AGCAGTGTAACTGTTTCAAC 20  
XX  
XX  
XX RESULT 1856  
ABA97491/c  
ID ABA97491 standard; DNA; 20 BP.  
XX  
XX  
XX ABA97491;  
XX  
XX 16-APR-2002 (first entry)  
XX  
XX ICAM-1 targeted antisense peptide nucleic acid SEQ ID NO: 37.  
XX  
XX Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical;  
XX cytostatic; virucide; dermatological; antiaslthmatic; cancer; antisense;  
XX viral infection; vitiligo; pigmentation disorder; asthma; ss.  
XX  
XX Unidentified.  
OS  
XX Synthetic.  
XX  
XX WO200179249-A2.  
XX  
XX 25-OCT-2001.  
XX  
XX 07-APR-2001; 2001WO-BP004027.  
XX  
XX 18-APR-2000; 2000DE-01019136.  
XX  
XX





the compound specifically hybridises with and inhibits the expression of PTP1B (e.g. an antisense oligonucleotide). Also included are (1) a compound of 8-50 nucleobases in length which specifically hybridises with an 8 nucleobase portion of an active site on a nucleic acid encoding PTP1B; (2) inhibiting the expression of PTP1B in cells or tissues comprising contacting the cells or tissues with the compound; treating an animal having or suspected of having a disease or condition associated with PTP1B comprising administering the compound; (4) decreasing blood sugar levels in an animal comprising administering the compound; (5) preventing or delaying the onset of a disease or condition associated with PTP1B in an animal comprising administering the compound; and (6) preventing or delaying the onset of an increase in blood glucose levels in an animal comprising administering the compound. The compound is used to inhibit the expression of PTP1B in cells or tissues; to treat or prevent or delay the onset of a disease or condition associated with PTP1B, such as type 2 diabetes, obesity, cancer (especially ovarian cancer, chronic myeloid leukaemia and hyperproliferative diseases in an animal having or suspected of having the disease or condition, and for decreasing blood sugar levels or preventing or delaying the onset of an increase in blood glucose levels in an animal. The compound is also used in diagnostics, therapeutics, prophylaxis, and in research reagents and kits. The present sequence is an antisense compound of the invention targeting human PTP1B

Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match	0.8%	Score 13.6	DB 1	Length 20
Best Local Similarity	80.0%	Pred. No. 1.1e+03		
Matches 16	Conservative 0	Mismatches 4	Indels 0	Gaps 0

QY 7 27 GAGGGGACCCCTGCACCGC 746  
||| | ||||| |||  
Db 20 GAGGTGTACCCCTGCAGAGC 1

RESULT 1859  
ABN79624  
ID ABN79624 standard; DNA; 20 BP.

AC	ABN79624;
XX	
DT	29-JUL-2002 (first entry)

Human FasL chimeric phosphorothioate oligonucleotide #14.

KW Human; immunosuppressive; antiinflammatory; hepatotropic; cytostatic  
KW vasotropic; hepatitis; cancer; allograft rejection; ds, Fas.

OS Homo sapiens.

PN US2002004490-A1.

PD 10-JAN-2002.  
XX

09-MAR-2001; 2001US-00802669.

18-SEP-2000; 2000US-00665615.

PA (DEAN/) DEAN N M.

PA (DEAN/) DEAN N M.  
PA (MARC/) MARCUSSON E G  
PA (WYAT/) WYATT J.  
PA (ZHAN/) ZHANG H.

PI Dean NM, Marcusson EG, Wyatt J, Zhang H;

DR WPI; 2002-204886/26  
XX

PT Novel anti-sense compound targeted to nucleic acid encoding Fas, Fas  
PT ligand or Fas associated protein-1 is useful for inhibiting expression of  
PT Fas, Fas ligand, or Fas-1 in cells or tissues, and for treating  
PT hepatitis.

PS Example 3; Page 15; 84pp; English.

This invention relates to an antisense compound encoding Fas, Fas ligand, or Fas associated protein-1 (Fap-1). The inhibition of Fas mediated signalling is thought to be immunosuppressive, antiinflammatory, hepatotropic, cytostatic and vasotropic. Antisense oligonucleotides were designed to target human Fas. Oligonucleotides were synthesised as chimeric oligonucleotides and are useful for treating an animal having an autoimmune or inflammatory disease e.g., hepatitis, cancer, a condition associated with apoptosis, allograft rejection, or ischemia reperfusion injury. Optionally, the above mentioned conditions are prevented by contacting the allograft with the antisense oligonucleotide. The oligonucleotides are used in diagnostics, therapeutics, prophylaxis and as research reagents and in kits. The oligonucleotides are also useful for research purposes. The present nucleotide sequence is related to human fas

Sequence 20 BP; 3 A; 10 C; 3 G; 4 T; 0 U; 0 Other

Query Match	0.8%	Score 13.6	DB 1	Length 20
Best Local Similarity	80.0%	Pred. No. 1.1e+03		
Matches 16	Conservative	0	Mismatches 4	Indels 0
				Gaps 0

QY	1659	CACCCCTCACAGGCAGCCC	16
Db	1	CCCTCTTACATGGCAGCCC	20

RESULT 1860  
ABQ79630/c  
ID ABQ79630 standard; DNA; 20 BP

AC	ABQ79630;
XX	
DT	25-NOV-2002 (first entry)

DE iPFK-2-specific oligonucleotide S-iPFK-2 (A) (sense, position 35-55).

KW Human; phosphonucleotidase-2; iPK-2; antisense therapy; anticancer;  
 KW antiinflammatory; cytostatic; ss.  
 YX

OS Synthetic.

XX  
PN US6413939-B1

PD 02-JUL-2002.

PF 31-OCT-1997;

PR 31-OCT-1997; 97US-00961578.

PA (PICO-) PICOWER INST MEDICAL RES.  
XX

XX  
F1 Bucala RD, Chesney J, Mitchell RA,  
XX

REF, 2002-0413/4/05.  
DN  
XX

PT diseases or cancers,

PT phosphofructokinase-2.

PS Example 4; Col 8; 28pp; English.  
XY

The invention relates to antisense oligonucleotides of at least 10 bases complementary to inducible human phosphofructokinase-2 (1PFK-2) cDNA. The antisense oligonucleotides can be included in anticancer or antiinflammatory pharmaceutical compositions along with an oligonucleotide carrier. An 1PFK-2 antagonism such as an enzymatic inhibitor, anti-1PFK-2 antibody, or 1PFK-2 antisense molecule can be administered for treating inflammatory disease or rapidly-growing cancers. The present sequence represents an 1PFK-2-specific sense oligonucleotide

XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 1679 CCAACTACATCTTCCCTGCT 1698  
DB 20 CCAACGGCATCTTCGGGCT 1  
RESULT 1861  
ABQ79631  
ID ABQ79631 standard; DNA; 20 BP.  
XX  
AC ABQ79631;  
XX  
DT 25-NOV-2002 (first entry)  
DE iPFK-2-specific oligo AS-iPFK-2 (A) (antisense, position 35-55).  
XX  
KW Human; phosphofructokinase-2; iPFK-2; antisense therapy; anticancer;  
XX  
KW antiinflammatory; cytosstatic; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN US6413939-B1.  
XX  
PD 02-JUL-2002.  
XX  
PF 31-OCT-1997; 97US-00961578.  
XX  
PR 31-OCT-1997; 97US-00961578.  
XX  
PA (PICO-) PICOWER INST MEDICAL RES.  
XX  
PI Bucala RJ, Chesney J, Mitchell RA;  
XX  
DR WPI; 2002-641574/69.  
XX  
PT Novel antisense oligonucleotides useful for treating inflammatory  
XX  
PT diseases or cancers, comprises complementary sequence of inducible human  
XX  
PT phosphofructokinase-2.  
XX  
PS Claim 2; Col 25; 28pp; English.  
XX  
CC The invention relates to antisense oligonucleotides of at least 10 bases  
XX  
CC complementary to inducible human phosphofructokinase-2 (iPFK-2) cDNA. The  
XX  
CC antisense oligonucleotides can be included in anticancer or  
XX  
CC antiinflammatory pharmaceutical compositions along with an  
XX  
CC oligonucleotide carrier. An iPFK-2 antagonist such as an enzymatic  
XX  
CC inhibitor, anti-iPFK-2 antibody, or iPFK-2 antisense molecule can be  
XX  
CC administered for treating inflammatory disease or rapidly-growing  
XX  
CC cancers. The present sequence represents an iPFK-2-specific antisense  
XX  
CC oligonucleotide  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 1679 CCAACTACATCTTCCCTGCT 1698  
DB 1 CCAACGGCATCTTCGGGCT 20  
RESULT 1862  
ABL44330/C  
ID ABL44330 standard; DNA; 20 BP.  
XX

AC ABL44330;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1374.  
XX  
DE Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
XX  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA) RIKAGAKU KENKYUSHO.  
XX  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX  
PT Arraying genome clones.  
XX  
PS Claim 4; Page 32; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The  
XX  
CC method comprises: (a) clones of the genomic libraries contained in  
XX  
CC multiwell plates numbered for discrimination are mixed in each of the  
XX  
CC multiwell plates; (b) a primer designed based on the chromosome marker  
XX  
CC sequence is added to the mixture to carry out an amplification reaction;  
XX  
CC (c) a signal corresponding to the marker is detected from the resultant  
XX  
CC amplified product to specify the discrimination Nos. of the multiwell  
XX  
CC plates containing the clones having said marker sequence; (d) the order  
XX  
CC of the markers is changed so that the same discrimination Nos. succeed to  
XX  
CC the maximum in the specified discrimination Nos. to array the multiwell  
XX  
CC plates; (e) the clones in the multiwell plates of the specified  
XX  
CC discrimination Nos. are mixed respectively in each wells of longitudinal  
XX  
CC and lateral directions; (f) the mixed clones are cultured and the  
XX  
CC resultant cultures are amplified by using the above primer; (g) signals  
XX  
CC are detected from the amplified products; (h) the clones in the multiwell  
XX  
CC plates are specified from the detected result; and (i) the clones are  
XX  
CC reconstituted as the positions on the chromosome and arrayed. The  
XX  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
XX  
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634  
XX  
CC represent PCR primers for human chromosome 21q22.1, which are  
XX  
CC specifically claimed for use in the present invention  
XX  
SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 397 GAGTGCACTCTCCAGTGAG 416  
DB 20 GAGTGCAATCTGCACTGAG 1  
RESULT 1863  
ABL43558/C  
ID ABL43558 standard; DNA; 20 BP.  
XX  
AC ABL43558;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:602.  
XX  
DE Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
XX  
KW PCR primer; ss.

```
XX OS Homo sapiens.
XX PN JP2001321190-A.
XX PD 20-NOV-2001.
XX PF 12-MAR-2001; 2001JP-00068285.
XX PR 10-MAR-2000; 2000JP-00066716.
XX PA (RIKA ) RIKAGAKU KENKYUSHO.
XX PA (GENO-) GENOTEX YG.
XX DR WPI; 2002-144136/19.
XX PT Arraying genome clones.
XX PS Claim 4; Page 16; 528pp; Japanese.
XX CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination Nos. of the multiwell
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 519 GAGCTGACCCCTCAATAGCC 538
XX Db 20 GAAGATGACGCTGAGAGGCC 1
XX
XX RESULT 1864
XX ABL13935/C
XX ID ABL13935 standard; DNA; 20 BP.
XX AC ABL13935;
XX XX
XX DT 13-FEB-2003 (first entry)
XX XX
XX DE Human helicase-moi inhibiting oligonucleotide #60.
XX XX
XX KW Human; antisense gene therapy; phosphorothioate backbone;
XX KW antisense oligonucleotide; helicase-moi gene; inflammation; ss;
XX KW helicase-moi-associated condition; infection; tumour formation;
XX KW 2'-MOB nucleotide; 2'-methoxyethyl nucleotide.
XX OS Homo sapiens.
XX OS US6444466-B1.
XX PN 03-SEP-2002.
XX PD
```

```
XX PF 10-MAY-2001; 2001US-00853768.
XX PR 10-MAY-2001; 2001US-00853768.
XX PA (ISIS-) ISIS PHARM INC.
XX PA Ward DT, Watt AT;
XX DR WPI; 2002-749291/81.
XX PT Novel antisense compound for modulating expression of human helicase-moi
XX PT and for treating inflammation, specifically hybridizes to a specific
XX PT region in nucleic acid molecule encoding the human helicase-moi.
XX PS Example 15; Col 45-46; 52pp; English.
XX CC The invention comprises antisense oligonucleotides which are targeted to
XX CC the coding region of the human helicase-moi gene. The antisense
XX CC oligonucleotides of the invention are useful for inhibiting the
XX CC expression of human helicase-moi in cells or tissues, and for treating a
XX CC helicase-moi-associated condition. The antisense oligonucleotides of the
XX CC invention may also be used to delay infection, inflammation and tumour
XX CC formation. The present DNA sequence represents a human helicase-moi gene
XX CC antisense oligonucleotide of the invention. NOTE: The present DNA
XX CC sequence has a phosphorothioate backbone, bases 1-5 and 16-20 are 2'-
XX CC methoxyethyl (2'-MOE) nucleotides
XX SQ Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1380 GGCGGACTCTCTACCAAGC 1399
XX Db 20 GGACTACCTCATACCAAGC 1
XX
XX RESULT 1865
XX AAI67702
XX ID AAI67702 standard; DNA; 20 BP.
XX AC AAI67702;
XX XX
XX DT 27-FEB-2002 (first entry)
XX XX
XX DE SHH patched receptor (Ptc) cDNA amplifying forward primer.
XX XX
XX KW Cell culturing; embryonic stem; ES; central nervous system; Ptc; Shh;
XX KW dopaminergic; cholinergic; serotonergic; antiparkinsonian; nootropic;
XX KW neuroprotective; anticonvulsant; tranquilizer; vulnerrary; neuroleptic;
XX KW cerebroprotective; cell therapy; gene therapy; CNS; PCR primer; ss.
XX OS Homo sapiens.
XX OS WO200183715-A2.
XX PN WO200183715-A2.
XX XX
XX PD 08-NOV-2001.
XX XX
XX PF 01-MAY-2001; 2001WO-US014051.
XX PR 01-MAY-2000; 2000US-0201005P.
XX PA (USGO ) US GOVERNMENT.
XX PA (LEES/) LEE S.
XX PA (LUME/) LUMELSKY N.
XX PA (STUD/) STUDER L.
XX PA (MCKA/) MCKAY R D G.
XX XX
XX PI Lee S, Lumelsky N, Studer L, McKay RDG;
XX DR WPI; 2002-049345/06.
```



PT New mutated eukaryotic initiation factor 2 alpha kinase 3 genes and  
PT polypeptides in patients with Wolcott-Rallison syndrome, useful for  
PT preventing or treating e.g. diabetes, osteoporosis, arthritis or mental  
PT retardation.  
XX  
PS Example 4; Page 31; 93pp; English.  
XX  
CC The invention relates to an isolated variant of a mammal genomic sequence  
CC of the gene coding for the translation initiation factor 2 alpha kinase 3  
CC (EIF2AK3). The EIF2AK3 nucleic acid variant is useful for the production  
CC of a recombinant or synthetic polypeptide, and for screening compounds  
CC capable of modulating EIF2AK3. The nucleic acid is also useful for  
CC screening or diagnosing the diseases cited below. The nucleic acid of may  
CC be used as sense or anti-sense oligonucleotide. The nucleic acid may also  
CC be used as a primer or a probe, for detecting and/or amplifying a nucleic  
CC acid sequence. The compound is useful as a medication, particularly for  
CC preventing and/or treating diabetes and/or pathology related to WRS, e.g.  
CC type 1 diabetes, type 2 diabetes, the others forms of diabetes,  
CC osteoporosis, arthritis, hepatic dysfunction, nephropathies or other  
CC renal dysfunction, or mental retardation. The cell the mammal or the  
CC polypeptide is useful for studying the expression or the activity of the  
CC EIF2AK3 protein, and the direct or indirect interactions between the  
CC EIF2AK3 protein and chemical or biochemical compounds, which may be  
CC involved in the activity of the EIF2AK3 protein. The cell or polypeptide  
CC is also useful for screening chemical or biochemical compounds capable of  
CC interacting directly or indirectly with the EIF2AK3 protein, and/or  
CC capable of modulating the expression or the activity of the EIF2AK3  
CC protein. ABX24521-ABX24624 represent human EIF2AK3 coding sequences and  
CC PCR primers of the invention  
XX  
SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
XX  
QY 532 AATAGCCCATCTTGACAA 551  
DB 20 AATAGCCCGCTTTACTA 1  
XX  
RESULT 1868  
ABT06761/C  
ID ABT06761 standard; DNA; 20 BP.  
XX  
AC ABT06761;  
XX  
DT 07-NOV-2002 (first entry)  
XX  
DE Nucleic acid detection and discrimination related oligo SEQ ID No 104.  
XX  
KM Hybridising; quantification; detection; synthesis; amplification;  
KM oligonucleotide; ds.  
XX  
OS Unidentified.  
XX  
PN WO200257479-A2.  
XX  
PD 25-JUL-2002.  
XX  
PF 27-DEC-2001; 2001WO-US050460.  
XX  
PR 27-DEC-2000; 2000US-00748146.  
PR 23-OCT-2001; 2001US-0330468P.  
XX  
PA (INVT-) INVITROGEN CORP.  
XX  
PI Nazarenko I, Rashtchian A, Solus J, Pires RM, Darflier M,  
PI Gebeyehu G, Astatke M;  
XX  
DR WPI; 2002-627370/67.  
XX  
CC Composition comprising nucleic acid molecules and a oligonucleotide

PT capable of hybridizing with a portion of nucleic acid, and comprises a  
PT modified nucleotide at or near the 3'-terminal nucleotide.  
XX  
PS Example 29; Page 158; 307pp; English.  
XX  
CC The invention relates to a composition comprising one or more nucleic  
CC acid molecules and at least one oligonucleotide, where at least a portion  
CC of the oligonucleotide is capable of hybridizing with at least a portion  
CC of the nucleic acid molecule and where the oligonucleotide comprises a  
CC modified nucleotide at or near the 3'-terminal nucleotide. The various  
CC analogue oligonucleotides are useful for quantification or detection of  
CC one or more target nucleic acid molecules in a sample during nucleic acid  
CC synthesis or amplification. The analogues are also useful for determining  
CC the presence or absence of one or more particular nucleotides at a  
CC specific position or positions in a target nucleic acid molecule. The  
CC analogue oligonucleotides can also be useful for synthesising or  
CC amplifying one or more nucleic acid molecules, by mixing one or more  
CC nucleic acid templates or targets with the analogue oligonucleotides, and  
CC incubating the mixture to synthesise or amplify one or more nucleic acid  
CC molecules complementary to all or a portion of the templates or targets.  
CC This polynucleotide sequence represents a nucleic acid detection and  
CC discrimination related oligonucleotide of the invention  
XX  
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
XX  
QY 948 CTACTGCCACCGGACGAGG 967  
DB 20 CTACAGCCACCACATGAGAGG 1  
XX  
RESULT 1869  
ABT06751/C  
ID ABT06751 standard; DNA; 20 BP.  
XX  
AC ABT06751;  
XX  
DT 07-NOV-2002 (first entry)  
XX  
DE Nucleic acid detection and discrimination related oligo SEQ ID No 94.  
XX  
KM Hybridising; quantification; detection; synthesis; amplification;  
KM oligonucleotide; ds.  
XX  
OS Unidentified.  
XX  
PN WO200257479-A2.  
XX  
PD 25-JUL-2002.  
XX  
PF 27-DEC-2001; 2001WO-US050460.  
XX  
PR 27-DEC-2000; 2000US-00748146.  
PR 23-OCT-2001; 2001US-0330468P.  
XX  
PA (INVT-) INVITROGEN CORP.  
XX  
PI Nazarenko I, Rashtchian A, Solus J, Pires RM, Darflier M,  
PI Gebeyehu G, Astatke M;  
XX  
DR WPI; 2002-627370/67.  
XX  
CC Composition comprising nucleic acid molecules and a oligonucleotide  
PT capable of hybridizing with a portion of nucleic acid, and comprises a  
PT modified nucleotide at or near the 3'-terminal nucleotide.  
XX  
PS Example 29; Fig 36; 307pp; English.  
XX  
CC The invention relates to a composition comprising one or more nucleic  
CC acid molecules and at least one oligonucleotide, where at least a portion

CC of the oligonucleotide is capable of hybridising with at least a portion  
CC of the nucleic acid molecule and where the oligonucleotide comprises a  
CC modified nucleotide at or near the 3'-terminal nucleotide. The various  
CC analogue oligonucleotides are useful for quantification or detection of  
CC one or more target nucleic acid molecules in a sample during nucleic acid  
CC synthesis or amplification. The analogues are also useful for determining  
CC the presence or absence of one or more particular nucleotides at a  
CC specific position or positions in a target nucleic acid molecule. The  
CC analogue oligonucleotides can also be useful for synthesising or  
CC amplifying one or more nucleic acid molecules, by mixing one or more  
CC nucleic acid templates or targets with the analogue oligonucleotides, and  
CC incubating the mixture to synthesise or amplify one or more nucleic acid  
CC molecules complementary to all or a portion of the templates or targets.  
CC This polynucleotide sequence represents a nucleic acid detection and  
CC discrimination related oligonucleotide of the invention  
XX  
XX Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Sequence	20 BP, 2 A, 5 C, 6 G, 7 T, 0 U, 0 Other;
Query Match	0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity	80.0%; Pred. NO. 1, 1e+03;
Matches	16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

QY      948  C T A C T G C C A C C G G C A G A G G      967
          |||||
Db      20   C T A C A G C C A C C A T G A G A G G      1

```

RESULT 1870  
ABT06760/c  
ID ABT06760 standard; DNA; 20 BP.

AA  
AC  
XX  
DT

ABT06760;  
07-NOV-2002 (first entry)

Nucleic acid detection and discrimination related oligo SEQ ID No 103.

aa Hybridising; quantification; detection; synthesis; amplification;  
KM oligonucleotide; ds.  
KM

OS unidentified

PN W0200257479-A2.

PD 25-JUL-2002.

27-DEC-2001: 2001WO-US050460.

27-DEC-2000; 2000US-00748146.

23-OCT-2001; 2001US-0330468P.

PA (INVI-) INVI TROGEN CORP.

PI Nazarenko I, Rastchian A, Solus J, Pires RM, Darfler M;

PI Gebeyehu G, Astatke M;

DR WPI; 2002-627370/67.

PT Composition comprising nucleic acid molecules and an oligonucleotide capable of hybridizing with a portion of nucleic acid, and comprises a modified nucleotide at or near the 3'-terminal nucleotide.

Example 29; Page 158; 307pp; English.

The invention relates to a composition comprising one or more nucleic acid molecules and at least one oligonucleotide, where at least a portion of the oligonucleotide is capable of hybridizing with at least a portion of the nucleic acid molecule and where the oligonucleotide comprises a modified nucleotide at or near the 3'-terminal nucleotide. The various analogue oligonucleotides are useful for quantification or detection of one or more target nucleic acid molecules in a sample during nucleic acid synthesis or amplification. The analogues are also useful for determining the presence or absence of one or more particular nucleotides at a

CC specific position or positions in a target nucleic acid molecule. The  
CC analogue oligonucleotides can also be useful for synthesising or  
CC amplifying one or more nucleic acid molecules, by mixing one or more  
CC nucleic acid templates or targets with the analogue oligonucleotides, and  
CC incubating the mixture to synthesise or amplify one or more nucleic acid  
CC molecules complementary to all or a portion of the templates or targets.  
CC This polynucleotide sequence represents a nucleic acid detection and  
CC discrimination related oligonucleotide of the invention

Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match	0.8%	Score 13.6;	DB 1;	Length 20;
Best Local Similarity	80.0%;	Pred. No. 1.1e+03;		
Matches 16; Conservative	0;	Mismatches 4;	Indels 0;	Gaps 0;

DY 948 CTACTGCCACCGGAGAGG 967  
||| ||| ||| |||  
Db 20 CTACAGCCACCATTGAGAGG 1

RESULT 1871  
ABQ62337  
ID ABQ62337 standard; DNA; 20 BP.

AC ABQ62337;

DT 16-AUG-2002 (first entry)

Human syntaxin 4 interacting protein antisense oligonucleotide 76.

Human; antisense gene therapy; Syntaxin 4 interacting protein; ssRNA

KW inflammation; tumour formation; phosphorothioate backbone;

KW 2'-O-methoxyethyl wing.

05 Homo sapiens.

PN WO200224864-J

PD 28-MAR-2002.

PF 19-SEP-2001;

PR 22-SEP-2000; 2000US-00668313

PA (ISIS-) ISIS PHARM INC.

PI Monia BP, Freier SM,

DR WPI; 2002-404952/43.

PT Novel antisense comp

PT diabetes, obesity and skeletal muscle disorder.

PS Claim 3; Page 84; 154pp; English.

AA The invention comprises antisense oligonucleotides designed to inhibit  
CC expression of Syntaxin 4 interacting protein. The antisense  
CC oligonucleotides of the invention are useful for inhibiting the  
CC expression of Syntaxin 4 interacting protein in cells or tissues. The  
CC antisense oligonucleotides are also useful for treating an animal having  
CC a disease or condition associated with Syntaxin 4 interacting protein  
CC (e.g. diabetes, obesity or a skeletal muscle disorder). The antisense  
CC oligonucleotides can also be used to prevent or delay infection,  
CC inflammation and tumour formation. The present DNA sequence represents a  
CC human Syntaxin 4 interacting protein antisense oligonucleotide. NOTE: The  
CC present sequence contains a phosphorothioate backbone and 2'-O-  
CC methoxyethyl wings

Sequence 20 BP; 11 A; 2 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1303 GAGTTCAGACATACACTA 1322

DB 1 GATTTCAAAAATATACCTA 20

RESULT 1872

ABZ31505

ID ABZ31505 standard; DNA; 20 BP.

AC ABZ31505;

DT 30-JAN-2003 (first entry)

DE Candida albicans GRACE strain PCR primer SEQ ID NO 5724.

XX Fungus; Yeast; tetracycline; promoter; GRACE strain; biosynthesis;

KW signal transduction; DNA replication; cell division; growth;

XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.

OS Candida albicans.

XX WO200253728-A2.

PD 11-JUL-2002.

XX 26-DEC-2001; 2001WO-US049486.

PR 29-DEC-2000; 2000US-0259128P.

PR 20-FEB-2001; 2001US-00792024.

PR 22-AUG-2001; 2001US-0314050P.

XX (ELIT-) ELITRA PHARM INC.

XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;

PI WPI; 2002-566694/60.

XX Constructing strains for identifying gene products as effective targets

XX for therapeutic intervention, by inactivating in the strain one allele of

XX a gene and placing other allele of the gene under conditional expression.

XX Claim 36; SEQ ID NO 5724; 167bp + Sequence Listing; English.

XX The invention relates to constructing (M1) a strain of diploid fungal

XX cells in which both alleles of a gene are modified, comprising modifying

XX one allele by insertion or replacement by a cassette having an

XX expressible selectable marker and modifying other allele by

XX recombination, of a promoter replacement fragment with a heterologous

XX promoter, so that expression of the second allele is regulated by the

XX promoter. (M1) is useful for constructing a strain of diploid fungal

XX cells in which both alleles of a gene are modified. The diploid fungal

XX cells having both alleles modified are useful for identifying a gene that

XX is essential to the survival or growth of a fungus, a gene that

XX contributes to the virulence and/or pathogenicity of a fungus, a gene

XX agent, an antifungal agent that inhibits the growth of a diploid fungus

XX and for identifying a therapeutic agent for treatment of a mammalian

XX disease. (M1) is useful for identifying a compound which modulates the

XX activity of a gene product, preferably enzymatic activity, carbon

XX compound catabolism, biosynthetic, transporter, transcriptional,

XX translational, signal transduction, DNA replication and cell division

XX activity. The method is useful for identifying a compound having the

XX ability to inhibit growth or proliferation of C. albicans cells and for

XX treating infection by C. albicans. The present sequence is that of a PCR

XX primer used in the method of the invention. Note: The sequence data for

XX this patent is not represented in the printed specification but is based

XX on sequence information supplied to Derwent by the European Patent Office

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 231 TGGTGTGTGTGGCGGCACTG 250

DB 1 TGGTGTGTGTGTGTGTG 20

RESULT 1873

ABA99824

ID ABA99824 standard; DNA; 20 BP.

AC ABA99824;

DT 11-JUN-2002 (first entry)

DE Murine capn12 exon 19 splice donor site.

XX Calpain protease; murine; gene therapy; screening; diagnosis; capn12; ss.

XX Mus sp.

OS

XX Key Location/Qualifiers

FT exon 1..10

FT /\*tag= a

FT /number= 19

FT intron 11..20

FT /\*tag= b

FT /number= 19

XX DE10031932-A1.

XX 10-JAN-2002.

XX 30-JUN-2000; 2000DE-01031932.

XX 30-JUN-2000; 2000DE-01031932.

XX (BADI ) BASF AG.

XX WPI; 2002-115441/16.

XX New calpain protein 12 with cysteine protease activity, useful for

XX treating specific deficiency disorders.

XX PS Disclosure; Fig 2c; 36bp; German.

XX This invention describes a novel murine calpain protease 12 (capn12). The

XX calpain protease of the invention, related proteins and nucleic acid that

XX encodes it, are useful for treatment (including gene therapy) of diseases

XX associated with insufficient expression of the calpain protease. The

XX protein is also used to screen for calpain protein effectors and to raise

XX specific immunoglobulins (Ig) useful for diagnosis. Also the

XX polynucleotide encoding capn12 is useful, e.g. as primers and probes, for

XX diagnosis of diseases, or predileposition to them, and for recombinant

XX capn12 exon 19 splice donor site described in the disclosure of the

XX invention

XX Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

XX QY 1684 TACATCTTCCTGCTTACTC 1703

XX DB 1 TGCATCTTCCTGAGTACTC 20

XX RESULT 1874

XX ABA97923/c

```

ID  ABN97923 standard; DNA; 20 BP.
XX
XX  ABN97923;
AC
XX  30-JUL-2002 (first entry)
DT
XX
DE  GAPDH amplification control forward primer.
XX
XX  NEDD-1; cytosolic; human; ss; PCR; primer.
XX
XX  Homo sapiens.
XX
XX  WO200226818-A2.
XX
XX  04-APR-2002.
XX
XX  26-SEP-2001; 2001WO-US030287.
XX
XX  27-SEP-2000; 2000US-0236359P.
XX  30-JAN-2001; 2001WO-US000661.
XX  30-JAN-2001; 2001WO-US000662.
XX  30-JAN-2001; 2001WO-US000663.
XX  30-JAN-2001; 2001WO-US000664.
XX  30-JAN-2001; 2001WO-US000665.
XX  30-JAN-2001; 2001WO-US000666.
XX  30-JAN-2001; 2001WO-US000667.
XX  30-JAN-2001; 2001WO-US000668.
XX  30-JAN-2001; 2001WO-US000669.
XX  30-JAN-2001; 2001WO-US000670.
XX  01-JUN-2001; 2001US-00872462.
XX
XX  (AEOM-) AEOMICA INT.
XX
XX  Gu Y, Corrigan A;
XX
XX  WPI; 2002-426011/45.
XX
XX  Polynucleotide and polypeptide of human NEDD-1 useful for diagnosing,
PT  treating or preventing a disorder associated with decreased or increased
PT  expression or activity of the polypeptide.
XX
XX  Example 2; Page 94; 190pp; English.
XX
XX  This invention relates to an isolated polynucleotide encoding human NEDD-
CC  1, which is cytosolic in its action. The polynucleotide is useful for
CC  diagnosing diseases caused by mutation in human NEDD-1, and for
CC  diagnosing or monitoring diseases caused by altered expression of human
CC  NEDD-1. Fragments of NEDD-1 are useful as hybridisation probes and
CC  primers, and to direct expression or synthesis of epitopic or immunogenic
CC  protein fragments. The proteins are useful as therapeutic supplement in
CC  patients with specific deficiency in human NEDD-1 production, and for
CC  treating subjects preferably with defects in NEDD-1. The present sequence
CC  is a PCR primer related to human NEDD-1
XX
XX  Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY  621 TAAGCTGACAACTGGGCG 640
DB  20 TGAGCTTGACAAAGTGTG 1
XX
XX  RESULT 1875
XX  ABK43252/C
XX  ABK43252 standard; DNA; 20 BP.
XX
XX  ABK43252;
XX
XX  05-JUN-2002 (first entry)
XX
XX

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```

DE  Human HKN1 exon 9 PCR primer #1.
XX
XX  HKN1; ss; chromosome 18p; bipolar affective disorder; BAD; PCR; primer;
XX  severe bipolar affective (mood) disorder; BP-1; schizophrenia;
XX  Hong Kong new gene 1; anti-manic; antidepressant; neuroleptic.
XX
XX  Homo sapiens.
XX
XX  WO200210366-A2.
XX
XX  07-FEB-2002.
XX
XX  02-AUG-2001; 2001WO-US024417.
XX
XX  02-AUG-2000; 2000US-00631275.
XX  28-NOV-2000; 2000US-00722544.
XX
XX  (MILL-) MILLENNIUM PHARM INC.
XX  (REGC ) UNIV CALIFORNIA.
XX
XX  Chen H, Freimer NB, Novak T;
XX
XX  WPI; 2002-195962/25.
XX
XX  New nucleic acid molecule Hong Kong New Gene 1 (HKN1), useful for
PT  screening for molecules which modulate HKN1 expression for the treatment
PT  of bipolar disorder and schizophrenia.
XX
XX  Disclosure; Page 74; 367pp; English.
XX
XX  The invention relates to an isolated nucleic acid molecule comprising a
CC  nucleotide sequence that encodes a Hong Kong New Gene (HKN1) 1 gene
CC  product. The human gene for HKN1 is located on chromosome 18p in an area
CC  associated with bipolar affective disorder, BAD. Also included are an
CC  expression vector comprising the nucleic acid, a host cell expressing the
CC  nucleic acid, an anti-HKN1 antibody, a method of identifying modulators
CC  of HKN1, and identifying an individual (at risk of) having HKN1-
CC  mediated disorder comprising detecting the presence or absence of a
CC  polymorphism that correlates with an HKN1 allele associated with the
CC  disorder, where the presence of the polymorphism indicates that the
CC  individual (is at risk of) having HKN1-mediated disorder. A (small
CC  molecule) compound which modulates (inhibits or potentiates) expression
CC  of a HKN1 gene or gene product in a human individual is useful for the
CC  treatment of a HKN1-mediated disorder such as bipolar affective disorder
CC  (BAD), severe bipolar affective (mood) disorder (BP-1) and schizophrenia.
CC  The present sequence is PCR primer which amplifies a HKN1 exonic
CC  sequence
XX
XX  Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY  156 GTCATGACACTCCGAGGTG 175
DB  20 GTCATGAACCTTGAGGTG 1
XX
XX  RESULT 1876
XX  ABN80949
XX  ABN80949 standard; DNA; 20 BP.
XX
XX  ABN80949;
XX
XX  15-JUL-2002 (first entry)
XX
XX  Mouse caspase 7 phosphorothioate oligonucleotide SEQ ID NO:127.
XX
XX  Caspase 7; antisense modulation; anti-inflammatory; cytosolic;
XX  antisense therapy; caspase 7 inhibitor; inflammatory condition;
XX  hyperproliferative disorder; cancer; bone metabolism; infection;
XX  cholesterol disorder; inflammation; tumour; phosphorothioate; ss.
XX

```



```
XX OS Mus musculus.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT modified_base 1..5
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) wing"
XX FT /note= "2'-methoxyethyl (2'-MOE) wing"
XX PN WO20022640-A1.
XX PD 21-MAR-2002.
XX PF 10-SEP-2001; 2001WO-US028232.
XX PR 11-SEP-2000; 2000US-00659860.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Zhang H, Watt AT;
XX PI WPI; 2002-404806/43.
XX PT Novel antisense compounds targeted to nucleic acids encoding caspase 7,
XX PT for modulating gene expression and treating diseases associated with
XX PT expression of caspase 7 in humans.
XX PS Claim 3; Page 88; 138pp; English.
XX CC The present invention describes a compound (I) 8-50 nucleobases in length
XX CC targeted to a nucleic acid molecule encoding caspase 7, which
XX CC specifically hybridises with and inhibits the expression of caspase 7.
XX CC (I) has antiinflammatory and cytostatic activities, and can be used in
XX CC antisense therapy and as an inhibitor of caspase 7 expression. (I) is
XX CC useful for inhibiting the expression of caspase 7 in human cells or
XX CC tissues, and for treating a human having a disease or condition
XX CC associated with caspase 7 including inflammatory condition,
XX CC hyperproliferative disorder (cancer), or bone metabolism or cholesterol
XX CC disorder. (I) is useful for diagnostics, therapeutics, prophylaxis and as
XX CC research reagent and kits. (I) is useful prophylactically to prevent or
XX CC delay infection, inflammation or tumour formation. The present sequence
XX CC represent a mouse caspase 7 inhibiting chimeric phosphorothioate
XX CC oligonucleotide having 2'-MOE wings and a deoxy gap, which is used in an
XX CC example from the present invention
XX SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 710 TCAGACTGGAACTGAGAG 729
XX DB 1 TCAGACTGGAACTGAGAGT 20
XX
XX RESULT 1877
XX ID AEN80937/c
XX AC AEN80937;
XX AC AEN80937;
XX DT 15-JUL-2002 (first entry)
XX DE Mouse caspase 7 phosphorothioate oligonucleotide SEQ ID NO:115.
```

```
XX OS Caspase 7, antisense modulation; antiinflammatory; cytostatic;
XX KW antisense therapy; caspase 7 inhibitor; inflammatory condition;
XX KW hyperproliferative disorder; cancer; bone metabolism; infection;
XX KW cholesterol disorder; inflammation; tumour; phosphorothioate; ss.
XX OS Mus musculus.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT modified_base 1..5
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) wing"
XX FT /note= "2'-methoxyethyl (2'-MOE) wing"
XX PN WO20022640-A1.
XX PD 21-MAR-2002.
XX PF 10-SEP-2001; 2001WO-US028232.
XX PR 11-SEP-2000; 2000US-00659860.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Zhang H, Watt AT;
XX PI WPI; 2002-404806/43.
XX PT Novel antisense compounds targeted to nucleic acids encoding caspase 7,
XX PT for modulating gene expression and treating diseases associated with
XX PT expression of caspase 7 in humans.
XX PS Claim 3; Page 88; 138pp; English.
XX CC The present invention describes a compound (I) 8-50 nucleobases in length
XX CC targeted to a nucleic acid molecule encoding caspase 7, which
XX CC specifically hybridises with and inhibits the expression of caspase 7.
XX CC (I) has antiinflammatory and cytostatic activities, and can be used in
XX CC antisense therapy and as an inhibitor of caspase 7 expression. (I) is
XX CC useful for inhibiting the expression of caspase 7 in human cells or
XX CC tissues, and for treating a human having a disease or condition
XX CC associated with caspase 7 including inflammatory condition,
XX CC hyperproliferative disorder (cancer), or bone metabolism or cholesterol
XX CC disorder. (I) is useful for diagnostics, therapeutics, prophylaxis and as
XX CC research reagent and kits. (I) is useful prophylactically to prevent or
XX CC delay infection, inflammation or tumour formation. The present sequence
XX CC represent a mouse caspase 7 inhibiting chimeric phosphorothioate
XX CC oligonucleotide having 2'-MOE wings and a deoxy gap, which is used in an
XX CC example from the present invention
XX SQ Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1204 CTCCTCCGGCGCCACGGT 1223
XX DB 20 CTCCTTCCTTACCTCACGGT 1
XX
XX RESULT 1878
XX ID AAD39347
XX AC AAD39347 standard; DNA; 20 BP.
```

AC AAD39347;  
 XX  
 DT 04-OCT-2002 (first entry)  
 XX  
 XX Human Von Willebrand factor-cleaving protease cloning PCR primer, 6395.  
 XX  
 KM Human; Von Willebrand factor-cleaving protease; vWF-cp; therapy; enzyme;  
 KM transgenic animal; immunisation; thromboembolic disease; preclampsia;  
 KM thrombotic thrombocytopenic purpura; TTP; Henoch-Schönlein purpura;  
 KM thrombosis; neonatal thrombocytopenia; haemolytic-uraemic syndrome;  
 KM transgenic; anticoagulant; RT-PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO200242441-A2.  
 XX  
 PD 30-MAY-2002.  
 XX  
 PE 20-NOV-2001; 2001WO-EP013391.  
 XX  
 PR 22-NOV-2000; 2000US-00721254.  
 PR 12-APR-2001; 2001US-00833328.  
 XX  
 PA (BAXT ) BAXTER AG.  
 XX  
 PI Laemmle B, Gerlitsen HE, Furlan M, Turecek P, Schwarz H;  
 PI Scheiflinger F, Antoine G, Kerschbaumer R, Tagliavacca L;  
 PI Zimmermann K, Voelkel D;  
 XX  
 DR WPI; 2002-479950/51.  
 XX  
 PT Novel isolated or substantially purified Von Willebrand factor-cleaving  
 PT protease, useful for producing preparation for therapy of thrombosis and  
 PT thromboembolic disease such as thrombotic thrombocytopenic purpura.  
 XX  
 PS Example 3; Page 34; 93pp; English.  
 XX  
 CC The invention relates to an isolated or substantially pure Von Willebrand  
 CC factor-cleaving protease (vWF-cp) polypeptide. vWF-cp is useful for  
 CC purifying vWF which involves providing vWF-cp as a ligand, contacting a  
 CC solution comprising vWF with the polypeptide ligand under conditions  
 CC where vWF is bound to the ligand and recovering from the ligand purified  
 CC vWF. vWF-cp is useful for producing anti-vWF cp polypeptide antibodies  
 CC which involves immunising an animal with vWF-cp and isolating the anti-  
 CC vWF cp polypeptide antibodies from the animal. vWF-cp is useful for  
 CC producing a preparation of prophylaxis and therapy of thrombosis and  
 CC thromboembolic disease such as thrombotic thrombocytopenic purpura (TTP),  
 CC Henoch-Schönlein purpura, preclampsia, neonatal thrombocytopenia or  
 CC haemolytic-uraemic syndrome. vWF-cp can also be used for processing  
 CC plasmatic or recombinantly produced vWF. The invention is useful for  
 CC construction expression systems and generating transgenic animals which  
 CC express the polypeptide in vivo. The present sequence is human vWF-cp  
 CC gene cloning RT-PCR primer  
 XX  
 SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 XX  
 DB 253 CCTGAGAGAGCCCCACACG 272  
 1 CCTGAGAGGGGTCCCAAGATG 20  
 XX  
 RESULT 1879  
 ID ABO74705  
 AC ABO74705 standard; DNA; 20 BP.  
 XX  
 AC ABO74705;  
 XX  
 DT 24-OCT-2002 (first entry)  
 XX

DE MAC2-BP gene sense PCR primer SEQ ID NO:48.  
 XX  
 KM Human; PCR primer; identification; tumour senescence; cytotoxic; ss;  
 KM abnormal cell proliferation; neoplastic cell growth; growth-inhibitory.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200261134-A2.  
 XX  
 PD 08-AUG-2002.  
 XX  
 PF 21-DEC-2001; 2001WO-US050574.  
 XX  
 PR 21-DEC-2000; 2000US-0257907P.  
 PR 17-DEC-2001; 2001US-00257907.  
 XX  
 PA (UNII ) UNIV ILLINOIS FOUND.  
 XX  
 PI Roninson IB, Chang B;  
 XX  
 DR WPI; 2002-619266/66.  
 XX  
 PT Identifying a compound that induces senescence in a mammalian p53  
 PT deficient or tumor cell comprises assaying expression of cellular genes  
 PT in the presence of the compound with expression of the genes in the  
 PT absence of the compound.  
 XX  
 PS Example 4; Page 52; 73pp; English.  
 XX  
 CC The present invention describes a method for identifying a compound that  
 CC induces senescence in a mammalian cell comprising culturing the cell in  
 CC the presence and absence of the compound, assaying expression of at least  
 CC one cellular gene (G1a) from 56 or a gene (G2) from 64 genes, with  
 CC corresponding accession numbers given in the specification, and  
 CC identifying compounds that induce senescence when expression of (G1a) or  
 CC expression of (G2) is lower, in the presence of the compound. Also  
 CC described: (1) a compound that induces senescence in a mammalian cell;  
 CC (2) assessing efficacy of a treatment of a disease or condition relating  
 CC to abnormal cell proliferation or neoplastic cell growth; (3) treating a  
 CC disease or condition relating to abnormal cell proliferation or  
 CC neoplastic cell growth; or (4) identifying a compound that inhibits  
 CC senescence-associated induction of cellular gene expression. The compound  
 CC is useful for treating or for assessing efficacy of treatment of a  
 CC disease or condition relating to abnormal cell proliferation or  
 CC neoplastic cell growth. The compound of the invention has a growth-  
 CC inhibitory effect without producing systemic side effects found with  
 CC other growth-inhibitory compounds. ABO74611 to ABO74734 represent PCR  
 CC primers which are used in an example from the present invention  
 XX  
 SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 XX  
 DB 48 ACCAGCAGTGTGACTGTGA 67  
 1 ACCATGAGTGTGATGCTGA 20  
 XX  
 RESULT 1880  
 ID ABR71229/c  
 AC ABR71229 standard; DNA; 20 BP.  
 XX  
 AC ABR71229;  
 XX  
 DT 15-JUL-2002 (first entry)  
 XX  
 DE Mouse HYPPLP1 locus PCR primer #302.  
 XX  
 KM Human; mouse; HYPPLP1; FCHL1; familial combined hyperlipidaemia; cancer;  
 KM lipid disorder; PCR; primer; ss.

```

XX OS Mus sp.
XX FT WO200220848-A2.
XX PN 14-MAR-2002.
XX PD
XX PF 07-SEP-2001; 2001WO-US028182.
XX PR 08-SEP-2000; 2000US-0231322P.
XX PA (REGC ) UNIV CALIFORNIA.
XX PI Bodnar JS, Castellani LW, Chatterjee A, De Jong P, Lusis AJ;
XX PI Ohmen J, Ross D, Tafuri S, Wu C;
XX DR WPI; 2002-329882/36.
XX FT New mouse HYPLIPI and human FCHL1 (familial combined hyperlipidemia)
XX PT genes and their sequence variations, useful for diagnosing, treating or
XX PT preventing lipid disorders and cancers.
XX PS Claim 11; Page 76; 102pp; English.
XX CC The invention relates to an isolated polynucleotide comprising a sequence
XX CC variation of a mouse HYPLIPI cDNA or a human FCHL1 (familial combined
XX CC hyperlipidaemia) gene. The FCHL1 polynucleotide, the FCHL1 polypeptide or
XX CC antibody immunoreactive to the FCHL1 polypeptide are useful for treating
XX CC or preventing cancer associated with expression of FCHL1, as well as for
XX CC treating lipid disorder. The mouse HYPLIPI cDNA or human FCHL1 gene are
XX CC also useful for diagnosing or prognosing a predisposition to lipid
XX CC disorder and cancer. ABK70902-ABK71303 represent mouse HYPLIPI, human
XX CC FCHL1 coding sequences and PCR primers of the invention
XX SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 16 GGATGGACAGGAGTGCAGAC 35
DB 20 GGATGGAGAGGCATCTCGAT 1

RESULT 1881
AAL46755/C
ID AAL46755 standard; DNA; 20 BP.
XX AC AAL46755;
XX DT 08-AUG-2002 (first entry)
XX DE ICAM antisense oligonucleotide #1.
XX KW Modified antisense oligonucleotide; antisense; HIV; cancer; infection;
XX KW cytosstatic; virucide; anti-HIV; hepatotropic; antiinflammatory;
XX KW phosphorothioate backbone; integrin; cell-cell adhesion receptor; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX FT modified_base 1..3
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "optionally phosphorothioate backbone"
XX FT modified_base 6..8
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "optionally phosphorothioate backbone"
XX FT modified_base 11..13
XX FT /*tag= c
XX FT /mod_base= OTHER

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FT modified_base 16..19
FT /*tag= d
FT /mod_base= OTHER
FT /note= "optionally phosphorothioate backbone"
XX EP1182206-A2.
XX 27-FEB-2002.
XX 07-NOV-1994; 2001EP-00124078.
XX 12-NOV-1993; 93DE-04338704.
XX 07-NOV-1994; 94EP-00117513.
XX (FARH ) HOECHST AG.
XX Peymann A, Uhlmann E, Mag M, Kretschmar G, Helsing M, Winkler I;
XX WPI; 2002-353922/39.
XX New nuclease-resistant oligonucleotides having modified non-terminal
XX pyrimidine nucleoside(s), useful e.g. for treating cancer or viral
XX diseases or as diagnostic reagents.
XX Disclosure; Page 12; 19pp; German.
XX The present invention relates to oligonucleotides having at least one non
XX -terminal pyrimidine nucleoside modified and additionally having the 5'-
XX and/or 3'-terminal modified. These can be used in the treatment of viral
XX infections, such as HIV, HSV-1, HSV-2, influenza virus, VSV, hepatitis B
XX and papilloma viruses, cancer and diseases involving integrins and cell-
XX cell adhesion receptors. The present sequence is an antisense
XX oligonucleotide of the invention
XX SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGGGG 245
DB 20 GAGAGGGGAGTGTGTGGGG 1

RESULT 1882
AAD44724/C
ID AAD44724 standard; DNA; 20 BP.
XX AC AAD44724;
XX DT 13-DEC-2002 (first entry)
XX DE Human c-raf kinase antisense oligonucleotide ISIS #5149.
XX KW Human; raf; hyperproliferation; neovascularisation; ocular angiogenesis;
XX KW therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
XX KW antisense; phosphorothioate backbone; c-raf kinase; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX US6410518-B1.
XX 25-JUN-2002.

```

PF 18-FEB-2000; 2000US-00506073.  
 XX  
 PR 31-MAY-1994; 94US-00250856.  
 PR 31-MAY-1995; 95WO-US007111.  
 PR 26-NOV-1996; 96US-00756806.  
 PR 07-JUL-1997; 97US-00888982.  
 PR 06-JUL-1998; 98WO-US013961.  
 PR 28-AUG-1998; 98US-00143214.  
 XX  
 (ISIS-) ISIS PHARM INC.  
 XX  
 PA Monia BP;  
 PI  
 XX WPI; 2002-597918/64.  
 DR  
 XX Treating cancer, angiogenesis or neovascularization by administering  
 PT antisense oligonucleotides targeted to human raf sequences.  
 PT  
 XX Disclosure; Col 12; 41pp; English.  
 PS  
 XX The present invention relates to novel antisense oligonucleotides which  
 CC are targeted to nucleic acids encoding human raf proteins and capable of  
 CC inhibiting raf expression. The invention also relates to methods of  
 CC inhibiting hyperproliferation of cells which involves contacting the  
 CC hyperproliferating cells with a therapeutically effective amount of an  
 CC oligonucleotide of the invention. The method is useful for treating  
 CC cancer, angiogenesis or neovascularisation, especially ocular  
 CC cancer, angiogenesis or neovascularisation. The present DNA sequence is an  
 CC antisense oligonucleotide targeted to human c-raf kinase  
 CC  
 XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1186 ATGGCCACAGCGCTCCCT 1205  
 DB 20 ATGGCTCCAGCGCTTCACCT 1  
 RESULT 1883  
 ABQ78911  
 ID ABQ78911 standard; DNA; 20 BP.  
 XX  
 AC ABQ78911;  
 XX  
 DT 23-OCT-2002 (first entry)  
 XX  
 DE S. roseosporus daptomycin biosynthetic gene cluster PCR primer P92.  
 XX  
 XX Daptomycin biosynthetic gene cluster; thioesterase; antibacterial;  
 XX fungicide; virucide; antiparasitic; immunomodulator; antilipemic;  
 KW cytosatic; gene therapy; antimitotic; immunomodulatory; siderophore;  
 KW anti-cholesterolemic; agrochemical; linker; PCR; primer; ss.  
 XX  
 OS Streptomyces roseosporus.  
 XX  
 PN WO200259322-A2.  
 XX  
 PD 01-AUG-2002.  
 XX  
 PF 17-OCT-2001; 2001WO-US032354.  
 XX  
 PR 17-OCT-2000; 2000US-0240879P.  
 PR 28-FEB-2001; 2001US-0272207P.  
 PR 06-AUG-2001; 2001US-0310385P.  
 XX  
 XX (MIAO/) MIAO V P W.  
 PA (BRIA/) BRIAN P.  
 PA (BALT/) BALTZ R H.  
 PA (SILV/) SILVA C J.  
 XX

PI Miao VPW, Brian P, Baltz RH, Silva CJ;  
 XX WPI; 2002-599794/64.  
 XX  
 XX Isolated nucleic acid molecule from a bacterial daptomycin biosynthetic  
 PT gene cluster encoding a thioesterase or thioesterase domain, useful for  
 PT generating novel linear and cyclic peptides, and products in a cell.  
 XX  
 XX Example 2; Page 91; 227pp; English.  
 PS  
 XX The invention relates to a novel isolated nucleic acid molecule  
 CC comprising a sequence that encodes a thioesterase or thioesterase domain,  
 CC derived from a bacterial daptomycin biosynthetic gene cluster. The  
 CC proteins of the invention have antibacterial, fungicide, virucide,  
 CC antiparasitic, immunomodulator, antilipemic, and cytosatic activity. The  
 CC polynucleotides may have a use in gene therapy. The compositions and  
 CC methods of the present invention are useful for generating novel linear  
 CC and cyclic peptides and improving yield of a product in a cell expressing  
 CC an daptomycin non-ribosomal peptide synthetase (NRPS) to be used as new  
 CC compounds or in producing new compounds, such as antibiotics,  
 CC antifungals, antivirals, antiparasitics, antimitotics, antitumour agents,  
 CC immunomodulatory agents, anti-cholesterolemic agents, siderophores,  
 CC agrochemicals and cytosatics. The sequence represents a PCR primer used  
 CC in the invention to amplify the S. roseosporus daptomycin biosynthetic  
 CC gene cluster from a BAC library  
 XX  
 SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 374 AGGCTTCAGCCAGCTCTCG 393  
 DB 1 AGCTCTCAGCCATCTCTCG 20  
 RESULT 1884  
 ABX97255  
 ID ABX97255 standard; DNA; 20 BP.  
 XX  
 AC ABX97255;  
 XX  
 DT 20-MAY-2003 (first entry)  
 XX  
 DE Human NOV-associated forward primer from primer-probe set Ag3338.  
 XX  
 KW NOVX; cytostatic; cardiant; antiarteriosclerotic; antiasthmatic; cancer;  
 KW hypotensive; cardiomyopathy; bronchial asthma; gene therapy; vaccine;  
 KW human; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200272757-A2.  
 PN  
 XX 19-SEP-2002.  
 PD  
 XX 08-MAR-2002; 2002WO-US006908.  
 XX  
 PF 08-MAR-2001; 2001US-0274101P.  
 PR 08-MAR-2001; 2001US-0274194P.  
 PR 08-MAR-2001; 2001US-0274281P.  
 PR 08-MAR-2001; 2001US-0274322P.  
 PR 09-MAR-2001; 2001US-0274849P.  
 PR 12-MAR-2001; 2001US-0275235P.  
 PR 13-MAR-2001; 2001US-0275578P.  
 PR 13-MAR-2001; 2001US-0275579P.  
 PR 13-MAR-2001; 2001US-0275601P.  
 PR 14-MAR-2001; 2001US-0276000P.  
 PR 16-MAR-2001; 2001US-0276776P.  
 PR 19-MAR-2001; 2001US-0276994P.  
 PR 20-MAR-2001; 2001US-0277239P.  
 PR 20-MAR-2001; 2001US-0277321P.

PR 20-MAR-2001; 2001US-0277327P.  
PR 21-MAR-2001; 2001US-0277791P.  
PR 22-MAR-2001; 2001US-0277833P.  
PR 23-MAR-2001; 2001US-0278152P.  
PR 26-MAR-2001; 2001US-0278894P.  
PR 27-MAR-2001; 2001US-0278999P.  
PR 27-MAR-2001; 2001US-0279036P.  
PR 28-MAR-2001; 2001US-0279344P.  
PR 30-MAR-2001; 2001US-0277338P.  
PR 30-MAR-2001; 2001US-0277995P.  
PR 30-MAR-2001; 2001US-0280233P.  
PR 02-APR-2001; 2001US-0280802P.  
PR 02-APR-2001; 2001US-0280822P.  
PR 02-APR-2001; 2001US-0280900P.  
PR 04-APR-2001; 2001US-0281194P.  
PR 13-APR-2001; 2001US-0283675P.  
PR 30-APR-2001; 2001US-0287424P.  
PR 02-MAY-2001; 2001US-0288066P.  
PR 03-MAY-2001; 2001US-0288342P.  
PR 03-MAY-2001; 2001US-0288528P.  
PR 15-MAY-2001; 2001US-0291190P.  
PR 16-MAY-2001; 2001US-0291099P.  
PR 16-MAY-2001; 2001US-0291240P.  
PR 30-MAY-2001; 2001US-0294485P.  
PR 31-MAY-2001; 2001US-0294889P.  
PR 31-MAY-2001; 2001US-0294899P.  
PR 18-JUN-2001; 2001US-0299027P.  
PR 19-JUN-2001; 2001US-0299303P.  
PR 19-JUN-2001; 2001US-0299310P.  
PR 10-JUL-2001; 2001US-0304354P.  
PR 31-JUL-2001; 2001US-0309198P.  
PR 16-AUG-2001; 2001US-0312903P.  
PR 10-SEP-2001; 2001US-0318462P.  
PR 12-SEP-2001; 2001US-0318770P.  
PR 27-SEP-2001; 2001US-0325430P.  
PR 27-SEP-2001; 2001US-0325681P.  
PR 18-OCT-2001; 2001US-0330380P.  
PR 31-OCT-2001; 2001US-0335301P.  
PR 14-NOV-2001; 2001US-0332172P.  
PR 14-NOV-2001; 2001US-0332271P.  
PR 14-NOV-2001; 2001US-0332272P.  
PR 14-NOV-2001; 2001US-0333184P.  
PR 21-NOV-2001; 2001US-0333272P.  
PR 03-DEC-2001; 2001US-0332094P.  
PR 03-DEC-2001; 2001US-0337426P.  
PR 04-DEC-2001; 2001US-0338092P.  
PR 03-JAN-2002; 2001US-0337185P.  
PR 07-MAR-2002; 2002US-0345705P.  
PR 07-MAR-2002; 2002US-00092900.  
PA (CURA-) CURAGEN CORP.  
XX  
XX Padigar M, Spytek KA, Shenoy SG, Taupier RJ, Pena CEA, Li L;  
XX Zerhusen BD, Gusev V, Ji W, Gorman L, Miller CE, Kekuda R;  
PI Patturajan M, Gangoli E, Vernet CAM, Guo X, Tchernev V;  
PI Fernandes ER, Casman SJ, Malyankar UM, Gerlach V, Liu Y, Anderson D;  
PI Spaderna SK, Catterton E, Burgess C, Leite M, Zhong H, Alsobrook JP;  
PI Lepley DM, Rieger DK;  
XX  
XX WPI; 2002-723332/78.  
XX  
XX NOVX polypeptides and polynucleotides, useful for preventing or treating  
PT a disorder associated with aberrant NOVX expression or activity e.g.,  
PT cancer, hypertension, atherosclerosis, cardiomyopathy or bronchial  
PT asthma.  
XX  
XX Example C; Page 565; 1103pp; English.  
XX  
XX This invention describes novel human NOVX polypeptides which have  
CC cytostatic, cardiant, antiarteriosclerotic, antiasthmatic and hypotensive  
CC activity. Pharmaceutical compositions comprising the NOVX proteins or  
CC nucleic acid molecules or NOVX antibodies are useful for preventing or  
CC treating a disorder associated with aberrant NOVX expression or activity

CC e.g. cancer, hypertension, atherosclerosis, cardiomyopathy or bronchial  
CC asthma. The products of the invention can be used for gene therapy or in  
CC a vaccine. ABX13460-ABX13462 and ABX97186-ABX97593 represent PCR primers  
CC and probes used in the amplification and isolation of the NOVX  
CC polynucleotides represented in ABX97008-ABX97185 which encode the  
CC polypeptides represented in ABU65041-ABU65218  
XX  
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 306 CCCACTCAGCTCTGCACAG 325  
Db 1 CCCATTGAGCTGAAACAG 20

RESULT 1885  
AAS18551/c  
ID AAS18551 standard; DNA; 20 BP.

XX AAS18551;

DT 12-MAR-2002 (first entry)

DE Mouse AGP-3 PCR primer #5.

Mouse; AGP-3; antiinflammatory; antiarthritic; immunosuppressive;  
dermatological; neuroprotective; nootropic; immunomodulator; metabolic;  
antidiabetic; analgesic; nephrotropic; osteopathic; cytostatic; fever;  
antiparkinsonian; antipsoriatic; vasotropic; antibacterial; asthma;  
AGP-3 receptor; tumour necrosis factor ligand family; AGP-3 receptor;  
mesenteric lymph node; AGP-3R; inflammatory disease; immune disorder;  
rheumatoid arthritis; graft-versus-host disease; Crohn's disease;  
pancreatitis; amyotrophic lateral sclerosis; ALS; Alzheimer's disease;  
diabetes; glomerulonephritis; inflammatory bowel disease; ischaemia; ss;  
multiple sclerosis; Parkinson's disease; transgenic animal; PCR primer.

OS Mus musculus.

PN WO200185782-A2.

PD 15-NOV-2001.

PF 12-FEB-2001; 2001WO-US004568.

PR 11-FEB-2000; 2000US-0181800P.

PA (ANGE-) AMGEN INC.

PI Boyle WJ, Hsu H;

DR WPI; 2002-049441/06.

PT Composition useful for identifying modulator of receptor for treating  
PT asthma and glomerulonephritis, comprises AGP-3 (tumour necrosis factor  
PT ligand family member) receptor and encoding nucleic acids.

PS Disclosure; Page 39; 124pp; English.

CC The invention relates to a composition (I) comprising AGP-3 receptor  
CC (tumour necrosis factor ligand family member) related protein (II)  
CC attached to a vehicle protein. (I) is useful for modulating AGP-3-related  
CC activity in mesenteric lymph nodes (MLN) of a mammal. (II) is useful in  
CC assays to identify cells and tissues that express AGP-3R or proteins  
CC related to AGP-3R-related protein and for identifying compounds (agonists  
CC or antagonists) that interact with AGP-3R proteins. (II) is also useful  
CC for identifying intracellular proteins that interact with the respective  
CC cytoplasmic domains by yeast two-hybrid screening process. (II) is  
CC involved in B cell growth, survival and activation particularly in lymph  
CC node, spleen, and Peyer's patches. AGP-3R agonists and antagonists  
CC identified using (II) are used for modulating B cell response and are

used to treat diseases characterised by inflammatory processes or deregulated immune response such as rheumatoid arthritis, graft-versus-host disease, Crohn's disease, lupus, etc. (II) is also useful in the production of hybridoma cells which are derived from B cells, which involves treating the hybridoma cells with (II). (II) is useful in the treatment of inflammatory conditions of joints, e.g., rheumatoid arthritis, osteoarthritis, etc. (II), its agonists or antagonists are useful for treating acute pancreatitis, amyotrophic lateral sclerosis (ALS), Alzheimer's disease, asthma, atherosclerosis, cachexia/anorexia, diabetes, fever, glomerulonephritis, inflammatory bowel disease, ischaemic injury including cerebral ischaemia, multiple myeloma, multiple sclerosis, osteoporosis, Parkinson's disease, pain, reperfusion injury, septic shock, etc. The nucleic acids are also useful for developing transgenic animals expressing (II), which are useful for producing the polypeptides and for the study of in vivo biological activity. The present sequence represents mouse AGP-3 PCR primer #5

Sequence 20 BP; 6 A; 7 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 916 CTGTTCTGTCAGCTGCT 935  
|||||  
DB 20 CTGTTCTGTCAGCTGCT 1

RESULT 1886  
ABL94308/C  
ID ABL94308 standard; DNA; 20 BP.  
XX  
AC ABL94308;  
XX  
29-JUL-2002 (first entry)  
XX  
DE Human C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:74.  
XX  
KW Human; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2; LAP;  
TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP; transcription factor;  
tissue development; cellular function; proliferation; differentiation;  
hormone responsiveness; oxidative stress response;  
IL-6 signalling mediator; interleukin-6; carbohydrate metabolism;  
immunity; Th1 response; female fertility; gluconeogenesis; ovarian;  
cancer; tumour formation; type II; diabetes; infection; inflammation;  
expression inhibition; phosphorothioate; antisense oligonucleotide; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate linkages"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
cytosines are 5-methylcytosine"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
cytosines are 5-methylcytosine"  
XX  
PN US6271030-B1.  
XX  
XX 07-AUG-2001.  
PD  
XX 14-JUN-2000; 2000US-00593711.  
XX  
PF  
XX 14-JUN-2000; 2000US-00593711.  
PR  
XX

(ISIS-) ISIS PHARM INC.

Monia BP, Butler MM, Wyatt J;

WPI; 2002-214451/27.

Novel antisense compound targeted to nucleic acids encoding human or mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for inhibiting expression of human or mouse C/EBP beta in cells/tissues.

Example 15; Col 43-44; 69pp; English.

Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha) gene, which inhibit its expression. The antisense oligonucleotides were designed to target different regions of the human and/or mouse C/EBP alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels by quantitative real-time PCR. The C/EBP family of proteins are a family of transcription factors which regulate the expression of a wide range of genes that control normal tissue development, cellular function, cellular proliferation and functional differentiation. C/EBP beta (also known as C/EBP2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP) primarily regulates hormone responsiveness and oxidative stress responses and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is thought to be involved in carbohydrate metabolism, immunity, the Th1 response, female fertility and gluconeogenic pathways. C/EBP beta is expressed in the liver, lung, spleen, kidney, brain, and testis, with the highest expression found in the lung. It is also expressed at a higher level in malignant ovarian tissue compared with normal ovarian tissue, and its expression in pancreas is upregulated in response to chronically elevated levels of glucose, indicating that it is involved in the impairment of insulin secretion in type II diabetes. The oligonucleotides of the invention are useful for diagnosis, prevention and treatment of conditions associated with C/EBP beta expression, such as cancer (particularly ovarian cancer), tumour formation, diabetes (particularly type II diabetes), infection, or inflammation

Sequence 20 BP; 2 A; 8 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 65 TGAATCCAGGGGAGGGCCC 84

|||||  
DB 20 TGAGACTCCGGGAGGGCCC 1

RESULT 1887

ABK49114

ID ABK49114 standard; DNA; 20 BP.

XX

AC ABK49114;

XX 02-JUL-2002 (first entry)

XX Human KDR/FLK-1 mutagenic PCR primer for Y801F mutant.  
DE

XX Human; KDR; kinase insert domain-containing receptor; FLK-1; ss;  
fetal liver kinase-1; cytostatic; antidiabetic; antirheumatic;  
antiarthritic; signal transduction; phosphorylation; cell proliferation;  
angiogenesis; tumour; diabetic omentopathy; chronic rheumatoid arthritis;  
PCR; primer; mutant.  
XX

OS Homo sapiens.

OS Synthetic.

XX WO200229090-A1.

XX 11-APR-2002.

XX 02-OCT-2001; 2001WO-JP008684.

XX

XX

XX

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PR 03-OCT-2000; 2000JP-00303694.
XX (KYOW ) KYOWA HAKKO KOGYO KK.
PA (SHIB/) SHIBUYA M.
XX
XX Shibuya M, Takahashi T, Furuya A, Shitara K;
XX WPI; 2002-352237/38.
XX
XX Screening substances inhibiting the binding of signal-transducing
PT molecule to KDR/Flk-1 phosphorylated at tyrosine at 1175-position, as
PT cell proliferation inhibitors and angiogenesis inhibitors for treatment
PT of e.g. tumor.
XX
XX Example 8; Page 65; 81pp; Japanese.
XX
XX The invention relates to inhibiting the signal transduction of KDR/Flk-1
XX (kinase insert domain-containing receptor/fetal liver kinase-1) is by
XX to KDR/Flk-1 phosphorylated at tyrosine at 1175-position, as cell proliferation
XX to KDR/Flk-1 phosphorylated at tyrosine at 1175-position. Also
XX included are methods of detecting/inhibiting/screening for cell
XX proliferation, angiogenesis, KDR/Flk-1 signal transduction and KDR/Flk-1
XX phosphorylation at tyrosine at the 1175-position using the binding
XX inhibitors, compounds obtained by the screening methods, drugs containing
XX the inhibitors, a monoclonal antibody or its fragment recognising KDR/Flk
XX -1 phosphorylated at tyrosine at the 1175-position, a DNA encoding the
XX monoclonal antibody or its fragment, a recombinant vector containing the
XX DNA and a transformant obtained by transferring the recombinant vector
XX into a host cell. The method is useful for screening substances
XX inhibiting the binding of a signal-transducing molecule to KDR/Flk-1
XX phosphorylated at tyrosine at 1175-position, as cell proliferation
XX inhibitors and angiogenesis inhibitors for treatment of e.g. tumor,
XX diabetic omentopathy and chronic rheumatoid arthritis. A method for
XX detecting angiogenesis is also provided. The present sequence is a PCR
XX primer used to create a KDR/FLK-1 mutant where the Tyr at 801 is changed
XX to Phe
XX
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1281 GCCAGGCATCTGTCACACG 1300
DB 1 GACAGGCTTCTGTGCCATCG 20
|||||
|||||

RESULT 1888
ABI97222/c
ID ABI97222 standard; DNA; 20 BP.
XX
XX AC ABI97222;
XX
XX DT 16-FEB-2002 (first entry)
XX
XX DE Capture oligonucleotide Zip ID#4309 oligo #9.
XX
XX KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX
XX OS Synthetic.
XX
XX PN WO200179548-A2.
XX
XX PD 25-OCT-2001.
XX
XX PF 04-APR-2001; 2001WO-US010958.
XX
XX PR 14-APR-2000; 2000US-0197271P.
XX

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XX (CORR ) CORNELL RES FOUND INC.
XX
XX PA Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX DR WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX
XX Example 5; Fig 29; 300pp; English.
XX
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridise with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. ABI92074 to
XX ABI97546 represent oligonucleotide sequences used in the exemplification
XX of the present invention
XX
XX SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 920 TCCGTGTTCCAGCTGCTCCGT 939
DB 20 TCCGTGATTCACGGCTCCGT 1
|||||
|||||

RESULT 1889
AAS20906/c
ID AAS20906 standard; DNA; 20 BP.
XX
XX AC AAS20906;
XX
XX DT 09-APR-2002 (first entry)
XX
XX DE Human peptide transporter hPHT1 cDNA RT-PCR primer #3.
XX
XX KW Human; peptide histidine transporter 1; hPHT1; peptide transport;
XX peptide-based drug transport; cell membrane; gastrointestinal tract;
XX hPHT1-related disease; reverse transcriptase; RT-PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200192468-A2.
XX
XX PD 06-DEC-2001.
XX
XX PF 31-MAY-2001; 2001WO-US017650.
XX
XX PR 31-MAY-2000; 2000US-0208061P.
XX
XX PA (RUTF ) UNIV RUTGERS STATE NEW JERSEY.

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XX Knipp GT, Herrera-Ruiz D;  
 PI WPI; 2002-130529/17.  
 XX Novel isolated human peptide histidine transporter which facilitates  
 DR peptide transport across cell membranes in gastrointestinal tract, useful  
 XX as target for evaluating peptide and peptide-based drug transport.  
 PT Example 2; Page 55; 95pp; English.  
 PS The present invention relates to nucleic acid sequences encoding human  
 XX peptide histidine transporter 1 (hPHT1) protein, the hPHT1 proteins and  
 CC methods for using them. The nucleic acid sequences of the invention are  
 CC useful for screening a test compound for human PHT1 modulating  
 CC activity. The hPHT1 proteins are useful as a target for evaluating  
 CC peptide and peptide-based drug transport. The functional characterisation  
 CC of hPHT1 and the ability to correlate the Michaelis-Menten kinetics for a  
 CC particular substrate to the molar expression level of hPHT1 provides  
 CC crucial information regarding the ability of this transporter to  
 CC facilitate the uptake and transport of peptides and peptide-based drugs.  
 CC The PHT1 proteins facilitate peptide transport across cell membranes in  
 CC the gastrointestinal tract and other organs in which they are expressed.  
 CC The identification of full length hPHT1 clone facilitates the development  
 CC of optimal peptide-based drugs for treating patients with hPHT1-related  
 CC diseases. AAS20878-AAS20911 represent reverse transcriptase (RT)-PCR  
 CC primers used in the methods of the present invention  
 XX  
 XX Sequence 20 BP; 0 A; 5 C; 12 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 551 AGCCCTCTAGCGCGCCCTC 570  
 Db 20 AACGCCAGCGCGCGCGC 1  
 RESULT 1890  
 ABK67749  
 ID ABK67749 standard; DNA; 20 BP.  
 XX AC ABK67749;  
 XX 02-JUL-2002 (first entry)  
 DT Mouse transglutaminase associated PCR primer #9.  
 DE Transglutaminase; TGM; transamidation; autoimmune disease;  
 KW Addison's disease; AI haemolytic anaemia; AI thrombocytopenic purpura;  
 KW AI thyroid disease; atrophic gastritis; pernicious anaemia;  
 KW Chron's disease; colitis ulcerosa; Goodpasture syndrome; IgA nephropathy;  
 KW Ig glomerulonephritis; myasthenia gravis; partial lipodystrophy;  
 KW polypositis; primary biliary cirrhosis; primary sclerosing cholangitis;  
 KW progressive systemic sclerosis; recurrent pericarditis;  
 KW Sjogren's syndrome; relapsing polychondritis; arthritis; rheumatism;  
 KW sarcoidosis; SLE; splenic atrophy; diabetes; Wegener granulomatosis;  
 KW ulcerative colitis; vasculitis; vitiligo; PCR; primer; ss.  
 XX Mus sp.  
 OS WO200222830-A2.  
 XX 21-MAR-2002.  
 PN 14-SEP-2001; 2001WO-GB004120.  
 XX 15-SEP-2000; 2000GB-00022768.  
 PR 16-MAY-2001; 2001GB-00011995.  
 XX (UYCA-) UNIV COLLEGE CARDIFF.  
 PA

PI Aeschlimann DF, Grenard PM;  
 XX WPI; 2002-329954/36.  
 XX Nucleic acids which encode novel transglutaminase enzymes TG-Z and TG-Y  
 PT which can be used in diagnostic methods of autoimmune diseases.  
 XX Disclosure; Page 27; 67pp; English.  
 PS The invention relates to nucleic acids which encode novel polypeptides  
 XX having transglutaminase activity. The compositions of polypeptides are  
 CC useful for transamidation reactions on peptides and polypeptides.  
 CC Detection of the polypeptides with transglutaminase activity are useful  
 CC in a diagnostic method in a subject or in cells derived from a subject  
 CC having an autoimmune disease. The method for detecting transglutaminase  
 CC proteins may be used to diagnose autoimmune diseases which include  
 CC Addison's disease, AI haemolytic anaemia, AI thrombocytopenic purpura, AI  
 CC thyroid diseases, atrophic gastritis, pernicious anaemia, Chron's  
 CC disease, colitis ulcerosa, Goodpasture syndrome, IgA nephropathy, IgG  
 CC glomerulonephritis, myasthenia gravis, partial lipodystrophy,  
 CC polypositis, primary biliary cirrhosis, recurrent pericarditis, relapsing  
 CC progressive systemic sclerosis, recurrent arthritis, rheumatism, sarcoidosis, Sjogren's  
 CC syndrome, SLE, splenic atrophy, type I (insulin-dependent) diabetes  
 CC mellitus, Wegener granulomatosis, ulcerative colitis, vasculitis (both  
 CC systemic and cutaneous) and vitiligo. This sequence represents a primer  
 CC used in the study of transglutaminase genes in which DNA, amino acid  
 CC sequences and chromosomal locations of novel transglutaminases are  
 CC determined  
 XX  
 XX Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 599 TTGGGAACCTGGAGACCTAC 618  
 Db 1 TTGGGGAGCTGGAGAGCAAC 20  
 RESULT 1891  
 ABQ81403  
 ID ABQ81403 standard; DNA; 20 BP.  
 XX AC ABQ81403;  
 XX 12-DEC-2002 (first entry)  
 DT Arabidopsis AINTEGUMENTA-like gene PCR primer.  
 DE Lipid metabolism regulator; LTR; plant; transgenic plant;  
 KW transcription factor; seed oil; oilseed; cardiant; wril; AINTEGUMENTA;  
 KW PCR; primer; ss.  
 XX Arabidopsis thaliana.  
 OS WO200272775-A2.  
 XX 19-SEP-2002.  
 XX 08-MAR-2002; 2002WO-US007441.  
 XX 08-MAR-2001; 2001US-0274170P.  
 XX (BADI ) BASF PLANT SCI GMBH.  
 XX Benning C, Cernac A;  
 XX WPI; 2002-713509/77.  
 XX New isolated lipid metabolism regulator nucleic acid, useful for  
 PT producing transgenic plants having modified level of seed storage



PT compound, e.g. lipids for generating seed oils which have the ability of  
PT reducing risk of heart disease.

PS Example 2; Page 34; 72pp; English.

XX  
CC The present sequence is that of a primer for an AINTEGUMENTA-like protein  
CC gene of Arabidopsis thaliana. Overlapping PCR primers (see ABQ81398-407)  
CC were used in amplification and sequencing reactions to identify sequence  
CC changes in 2 wrl mutants compared to wild-type sequences in order to  
CC identify the true wrl gene. In subsequent experiments, wrl mutants were  
CC complemented with cosmid containing wild-type genomic DNA, and PCR was  
CC used to produce a full-length wrl cDNA (see ABQ81395) encoding a lipid  
CC metabolism regulator (LMR) protein (see ABB79954). LMR is suggested to  
CC act as a transcription factor regulating lipid and seed storage compound  
CC metabolism during seed development. The invention relates to the use of  
CC LMR nucleic acids in the production of transgenic plants having a  
CC modified level of a seed storage compound. The level of a lipid, fatty  
CC acid, starch or seed storage protein can be modified, yielding a seed oil  
CC that is medically and nutritionally useful in reducing the risk of heart  
CC disease

XX Sequence 20 BP; 1 A; 7 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1688 TCTTCCCTGTGCTACTCTCTG 1707

Db 1 TCTTCCCTGTGCTACTCTCTG 20

RESULT 1892

ABT08433

ID ABT08433 standard; DNA; 20 BP.

XX AC ABT08433;

XX 27-NOV-2002 (first entry)

XX Human Mac2-BP promoter PCR primer SEQ ID NO: 68.

XX Human; cyclin-dependent kinase; CDK; cyclin-dependent kinase inhibitor;  
KW inhibitor; cancer; age-related disease; promoter; atherosclerosis;  
KW cytosolic; antiarteriosclerotic; neurotropic; neuroprotective;  
KW nephrotropic; antiarthritic; arthritis; renal disease;  
KW Alzheimer's disease; amyloidosis; PCR; primer; ss.

XX Homo sapiens.

XX WO200266681-A2.

XX 29-AUG-2002.

XX 01-FEB-2002; 2002WO-US002784.

XX 01-FEB-2001; 2001US-0265840P.

XX 21-MAY-2001; 2001US-00861925.

XX (UNII ) UNIV ILLINOIS FOUND.

XX Poole J, Robinson IB, Chang B;

XX WPI; 2002-674960/72.

XX New recombinant expression construct, useful for identifying compounds  
PT that inhibit the induction of genes induced by cyclin-dependent kinase  
PT inhibitors for preventing or treating cancer, renal failure or  
PT Alzheimer's disease.

PS Example 11; Page 133; 137pp; English.

XX The present invention relates to a recombinant expression construct

CC encoding a reporter gene operably linked to a promoter from a mammalian  
CC gene induced by a cyclin-dependent kinase (CDK) inhibitor. The construct  
CC is useful for identifying compounds that inhibit the induction of genes  
CC induced by CDK inhibitors. The compounds are useful for preventing or  
CC treating a disease caused by CDK inhibitor induced gene expression, e.g.  
CC cancer other than colon cancer, renal failure, Alzheimer's disease,  
CC amyloidosis, age-related diseases, atherosclerosis or arthritis. The  
CC present sequence is a PCR primer used to amplify a human promoter  
CC suitable for use in the construct of the invention

XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 13.6; DB 1; Length 20;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 48 ACCAGCAGCTGTGACTGCTGA 67

Db 1 ACCATGAGCTGTGGATGCTGA 20

RESULT 1893

ADE64605/c

ID ADE64605 standard; DNA; 20 BP.

XX AC ADE64605;

XX 29-JAN-2004 (first entry)

XX Recombinant blood coagulation factor VIII protein related oligo #11.

XX blood coagulation factor VIII; type-A haemophilia; ss.

XX Unidentified.

XX CN1361178-A.

XX 31-JUL-2002.

XX 29-DEC-2000; 2000CN-00137779.

XX 29-DEC-2000; 2000CN-00137779.

XX (SHAN-) SHANGHAI BIO-CHEM INST CHINESE ACAD SCI.

XX Qi Z, Wang Q, Chen C;

XX WPI; 2002-741852/81.

XX New recombinant blood coagulation factor VIII and its production process  
PT and medicinal composition.

XX Example 3; Page 16 (disclosure); 31pp; Chinese.

XX The invention relates to a novel recombinant blood coagulation factor  
CC VIII, its production process and its medicinal composite for treating  
CC type-A haemophilia. The invention further comprises a medicinal  
CC composition containing the blood coagulation factor which promotes blood  
CC coagulation to the blood plasma of type-A haemophilia patients. This  
CC polynucleotide sequence represents an oligo relating to the recombinant  
CC blood coagulation factor VIII protein of the invention.

XX Sequence 20 BP; 8 A; 3 C; 3 G; 6 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 13.6; DB 1; Length 20;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1504 TCCATATTTTCAGTAAAGGA 1523

Db 20 TCCATATTTTCAGTAAAGTA 1

```
RESULT 1894
ADJ84167
ID ADJ84167 standard; DNA; 20 BP.
XX
AC
XX
AC ADJ84167;
XX
DT 06-MAY-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human WRN - SEQ ID 78.
XX
KW WRN; helicase; RECQL3; cytostatic; virucide; hyperproliferative disorder;
KW cancer; premature aging; viral infection; gene therapy; antisense;
KW 2'-methoxyethyl gapmer; 2'-MOE wing; phosphorothioate backbone; ss;
KW human; chromosome 8p12.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone throughout and
FT all cytidine residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-MOE (2'-methoxyethyl) bases"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER = 2'-MOE (2'-methoxyethyl) bases"
XX
XX WO200268690-A1.
XX
XX 06-SEP-2002.
XX
XX 05-FEB-2002; 2002WO-US003574.
XX
XX 23-FEB-2001; 2001US-00791211.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ward DT, Watt AT;
XX
XX WPI; 2002-750421/81.
XX
XX New antisense oligonucleotides for modulating WRN gene expression,
XX particularly useful for preventing, delaying or treating
XX hyperproliferative disorders (e.g. cancer), conditions involving
XX premature aging or viral infection.
XX
XX Claim 3; SEQ ID NO 78; 182pp; English.
XX
XX The invention relates to a novel compound that is 8-50 nucleobases in
XX length which is targeted to a nucleic acid molecule encoding WRN (RECQL3)
XX helicase and specifically hybridizes with and inhibits the expression of
XX WRN. The antisense oligonucleotide of the invention demonstrates
XX cytostatic and virucide activities and may be useful for treating an
XX animal having a disease or condition associated with WRN, such as a
XX hyperproliferative disorder, particularly cancer, or a disease or
XX condition involving premature aging or viral infection. The antisense
XX oligonucleotide may also be utilised during gene therapy procedures. The
XX current sequence is that of the antisense 2'-methoxyethyl (2'-MOE) gapmer
XX oligonucleotide of the invention which was targeted to human WRN
XX helicase. The current sequence comprises a central "gap" region of 10 2'-
XX deoxynucleotides, which is flanked on both sides by 5-nucleotide 2-MOE
XX "wings". The backbone linkages are phosphorothioate and all cytidines are
XX 5-methylcytidines.
XX
XX Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1181 ATGAGATGCGCACAGGCGGT 1200
Db 1 ATGTGATGCGCCATAGACTGT 20

RESULT 1895
ABQ80152
ID ABQ80152 standard; DNA; 20 BP.
XX
XX ABQ80152;
XX
DT 13-JUN-2003 (first entry)
XX
DE Right primer DBM0071B amplifies IL4R amplicon of 177 bp.
XX
XX Human; interleukin 4 receptor; IL4R; type 1; diabetes; allele;
XX insulin dependent diabetes mellitus; IDDM; myasthenia gravis; PCR;
XX single nucleotide polymorphism; SNP; autoimmune disease; amplify;
XX T helper type 1 mediated disease; rheumatoid arthritis; primer;
XX multiple sclerosis; inflammatory bowel disease; systemic sclerosis;
XX systemic lupus erythematosus; psoriasis; scleroderma; Grave's disease;
XX Guillain-Barre syndrome; Hashimoto's thyroiditis; ss.
XX
XX Homo sapiens.
XX
XX WO2003010335-A2.
XX
XX 06-FEB-2003.
XX
XX 17-JUL-2002; 2002WO-EP007956.
XX
XX 20-JUL-2001; 2001US-0306912P.
XX
XX (HOFF) ROCHE DIAGNOSTICS GMBH.
XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
XX
XX Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX
XX WPI; 2003-248086/24.
XX
XX Determining an individual's risk for type 1 diabetes, comprises detecting
XX the presence of an insulin dependent diabetes mellitus-associated
XX interleukin 4 receptor allele in a nucleic acid sample of the individual.
XX
XX Example 4; Page 35; 79pp; English.
XX
XX The sequences given in ABQ80141-52 represent primers which were used to
XX identify wild type and variant loci in the human interleukin 4 receptor
XX (IL4R). These primer sequences were used in the method of the invention
XX for determining an individual's risk for type 1 diabetes. The method
XX comprises detecting the presence of an insulin dependent diabetes
XX mellitus (IDDM)-associated interleukin 4 receptor allele in a nucleic
XX acid sample of the individual, where the presence of the allele indicates
XX the individual's risk for type 1 diabetes. The method identifies one or
XX more single nucleotide polymorphism (SNP) within the IL4R gene listed in
XX the specification. The method and the SNP's are useful for determining an
XX individual's risk for type 1 diabetes. The IL4R SNP's are also useful for
XX determining an individual's risk for any autoimmune disease or condition
XX or any T helper type 1 mediated disease, e.g. rheumatoid arthritis,
XX multiple sclerosis, inflammatory bowel disease, systemic lupus
XX erythematosus, psoriasis, scleroderma, Grave's disease, systemic
XX sclerosis, myasthenia gravis, Guillain-Barre syndrome, or Hashimoto's
XX thyroiditis
XX
XX Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1521 GGAGATTACGTACAAAGG 1540
```

```
Db      1  ||||| ||||| ||||| ||||| |||||
1  GCAGACTCAGCAACAAGAGG 20

RESULT 1896
ACC49159/c
ID  ACC49159 standard; DNA; 20 BP.
XX
AC  ACC49159;
XX
DT  19-JUN-2003 (first entry)
XX
DE  ICM-1 inhibitory antisense oligonucleotide SEQ ID NO:2.
XX
KW  Inhibition; antisense oligonucleotide; phosphorothioate; bioadhesive;
KW  enhanced mucosal drug absorption; antiulcer; antiinflammatory; cancer;
KW  antirheumatic; antiarthritic; cytostatic; ulcerative colitis; tumour;
KW  rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
KW  cellular proliferation; ss.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 1..20
FT  /*tag= a
FT  /mod_base= OTHER
FT  /note= "phosphorothioate linkages"
XX
PN  WO2003018134-A2.
XX
PD  06-MAR-2003.
XX
PF  22-AUG-2002; 2002WO-US026925.
XX
PR  22-AUG-2001; 2001US-00935316.
XX
PA  (ISIS-) ISIS PHARM INC.
XX
PI  Teng C, Weinbach SP, Tillman LG, Geary RS, Hardee GE;
XX  WPI; 2003-342432/32.
XX
DR  Oral pharmaceutical formulation for delivering bioactive macromolecule
XX  to mucosal surface, contains drug, bioadhesive compound, and penetration
XX  enhancer.
XX
PS  Disclosure; Page 28; 62pp; English.
XX
CC  The present invention describes an oral pharmaceutical formulation (I)
XX  for delivering a bioactive macromolecule to a mucosal surface. (I)
XX  comprises a first population of carrier particles comprising drug and a
XX  bioadhesive compound; and a second population of carrier particles
XX  comprising a penetration enhancer. Also described is a method for
XX  enhancing the mucosal absorption of the bioactive macromolecule in a
XX  mammal (preferably a human) by mucosally administering (I). (I) has
XX  antiulcer, antiinflammatory, antirheumatic, antiarthritic and cytostatic
XX  activities. (I) can be used for delivering a bioactive macromolecule to
XX  a mucosal surface. It is used for the oral delivery of a drug to an
XX  animal encompassing a human as well as other mammals, reptiles, fish,
XX  amphibians and birds. It is used to deliver drugs including peptides,
XX  proteins, monoclonal antibodies their fragments, nucleic acids (DNA and
XX  RNA), oligonucleotides, antisense oligonucleotides, and small molecules.
XX  It can be used to examine the function of various proteins and genes in
XX  an animal, including those that are essential to animal development. It
XX  can be used for the treatment of animals that are known or suspected to
XX  suffer from any disease treatable with the inventive composition, e.g.
XX  ulcerative colitis, rheumatoid arthritis, Crohn's disease, inflammatory
XX  bowel disease, or undue cellular proliferation (cancers and tumours). The
XX  present sequence represents an exemplary oligonucleotide from the present
XX  invention, which can be used to inhibit ICM-1
XX
SQ  Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      226  GAGAGTGGTGGTGGTGGCGG 245
Db      20  GAGAGGGGGAAGTGTGGGGG 1
        ||||| ||||| ||||| ||||| |||||
        ||||| ||||| ||||| ||||| |||||

RESULT 1897
ACA97206/c
ID  ACA97206 standard; DNA; 20 BP.
XX
AC  ACA97206;
XX
DT  11-AUG-2003 (first entry)
XX
DE  Vpr-driven construct associated primer #39.
XX
KW  PCR; primer; Vpr; ss; immune response; immunocompromise; HIV; cancer;
KW  gene therapy.
XX
OS  Unidentified.
XX
PN  US2003017137-A1.
XX
PD  23-JAN-2003.
XX
PF  22-JUL-1998; 98US-00120286.
XX
PR  22-JUL-1998; 98US-00120286.
XX
PA  (ALFI/) ALFIERI C.
PA  (TANN/) TANNER J.
PA  (ROUX/) ROUX P.
XX
PI  Alfieri C, Tanner J, Roux P;
XX  WPI; 2003-438926/41.
XX
DR  Novel DNA or RNA construct for increasing immune response of warm-blooded
XX  animal, has Vpr activated promoter, DNA segment encoding interleukin 2
XX  and secretory DNA encoding signal peptide functional in mammary cells.
XX
PS  Disclosure; Page 15; 28pp; English.
XX
CC  The invention relates to a DNA or RNA construct capable of expressing
XX  interleukin (IL)-2 in a warm-blooded animal or biological preparation,
XX  comprising a Vpr activated promoter, a transcribable DNA segment coding
XX  for IL-2 and a secretory DNA encoding for a signal peptide functional in
XX  mammary cells and operably linked between the promoter and the DNA
XX  segment to facilitate secretion of IL-2. The construct is useful for
XX  increasing the immune response of a warm-blooded animal or biological
XX  preparation, by introducing the construct in stem cells, antigen
XX  presenting cells or immune cell leukocytes, fibroblasts and epithelial
XX  cells, of the warm-blooded animal or biological preparation to obtain a
XX  transfect cell populations and administering a pharmaceutically
XX  effective amount of the transfect cell populations to the warm-blooded
XX  animal or biological preparation. The warm-blooded animal is an
XX  immunocompromised patient. The method is useful for stimulating immune
XX  response in immunocompromised patients affected with HIV, cancer and
XX  other immunocompromised patients. The present sequence represents a Vpr-
XX  driven construct associated primer. Note: The present sequence is
XX  displayed in the sequence listing but no further reference is made to it
XX  in the specification
XX
SQ  Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      965  AGGTGCTACCGAGACCTC 984
```



```
XX DE EGFR mRNA inhibiting antisense oligonucleotide AS3.
XX DE
XX KW Epidermal growth factor receptor; EGFR; cytostatic; cancer; EGF;
XX KW antisense; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO200290514-A2.
XX PD 14-NOV-2002.
XX PF 07-MAY-2002; 2002WO-US014557.
XX PR 07-MAY-2001; 2001US-0289055P.
XX PR 07-MAY-2001; 2001US-0289149P.
XX PA (HYBR-) HYBRIDON INC.
XX PI Agrawal S, Kandimalia ER;
XX PI WPI; 2003-120540/11.
XX DR
XX PT New synthetic oligonucleotide complementary to nucleic acids encoding
XX PT epidermal growth factor receptor (EGFR), useful for inhibiting the EGFR
XX PT gene or mRNA expression, and reducing cancer cell proliferation.
XX PS Claim 10; Page 12; 36pp; English.
XX CC The invention relates to synthetic antisense oligonucleotides
XX CC complementary to a region of nucleic acid encoding epidermal growth
XX CC factor receptor (EGFR) with location 245-1117, 2407-3201, 3786-4102 or
XX CC 4574-45633. The methods and compositions of the invention are useful for
XX CC enhancing inhibition of EGFR gene or mRNA expression, and reducing cancer
XX CC cell proliferation, in particular cancer cells of the colon, ovarian or
XX CC breast. Sequences ABZ23811-832 represent specific examples of such
XX CC antisense oligonucleotides that inhibit the EGFR mRNA expression
XX SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1553 GGTCTTCGTCGATCGCTGAC 1572
Db ||||| ||||| ||||| |||||
1 GGTCTTCGTCGATCGCTGCG 20

RESULT 1902
ABZ78149/c
ID ABX78149 standard; DNA; 20 BP.
XX AC ABX78149;
XX DT 16-APR-2003 (first entry)
XX DE Murine p38-alpha MAPK antisense oligonucleotide ISIS NO 100812.
XX KW p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;
XX KW antisense; antiarthritic; antiinflammatory; kinase inhibitor; mouse;
XX KW inflammatory disease; rheumatoid arthritis; gene therapy; ss.
XX OS Mus musculus.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "nucleotides 1-5 & 16-20 are 2'-methoxyethoxy
XX FT (MOE) nucleotides, nucleotides 1-4 & 16-19 are linked
XX FT via phosphodiester linkages, nucleotides 6-15 are 2'-
```

```
XX DE EGFR mRNA inhibiting antisense oligonucleotide AS3.
XX DE
XX KW Epidermal growth factor receptor; EGFR; cytostatic; cancer; EGF;
XX KW antisense; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO200290514-A2.
XX PD 14-NOV-2002.
XX PF 07-MAY-2002; 2002WO-US014557.
XX PR 07-MAY-2001; 2001US-0289055P.
XX PR 07-MAY-2001; 2001US-0289149P.
XX PA (HYBR-) HYBRIDON INC.
XX PI Agrawal S, Kandimalia ER;
XX PI WPI; 2003-120540/11.
XX DR
XX PT New synthetic oligonucleotide complementary to nucleic acids encoding
XX PT epidermal growth factor receptor (EGFR), useful for inhibiting the EGFR
XX PT gene or mRNA expression, and reducing cancer cell proliferation.
XX PS Claim 10; Page 12; 36pp; English.
XX CC The invention relates to synthetic antisense oligonucleotides
XX CC complementary to a region of nucleic acid encoding epidermal growth
XX CC factor receptor (EGFR) with location 245-1117, 2407-3201, 3786-4102 or
XX CC 4574-45633. The methods and compositions of the invention are useful for
XX CC enhancing inhibition of EGFR gene or mRNA expression, and reducing cancer
XX CC cell proliferation, in particular cancer cells of the colon, ovarian or
XX CC breast. Sequences ABZ23811-832 represent specific examples of such
XX CC antisense oligonucleotides that inhibit the EGFR mRNA expression
XX SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1236 ACACCTTCATCTTCGTAATCT 1255
Db ||||| ||||| ||||| |||||
1 AAAGTTCATCTTCGCAATCT 20

RESULT 1901
ABZ23813
ID ABZ23813 standard; DNA; 20 BP.
XX AC ABZ23813;
XX DT 18-MAR-2003 (first entry)
```

```
FT deoxy- nucleotides, nucleotides 5-16 are linked via
FT phosphorothioate linkages, all C nucleotides are 5-
FT methyl cytosines"
XX
PN US6448079-B1.
XX
XX 10-SEP-2002.
XX
XX 15-AUG-2000; 2000US-00640101.
XX
XX 06-APR-1999; 99US-00286904.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Gaarde WA, Nero P, Mckay R;
XX WPI; 2003-089122/08.
XX
XX New antisense compound, useful for preparing a composition for
XX diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid
XX arthritis.
XX
XX Example 5; Col 27-28; 44pp; English.
XX
XX This invention describes a novel antisense compound, which is 8-30
XX nucleobases in length targeted to a nucleic acid molecule encoding p38
XX mitogen-activated protein kinase (MAPK). The products of the invention
XX have antiarthritic and antiinflammatory activity, can act as
XX kinase inhibitors. The antisense compound is useful for preparing a
XX composition for diagnosing, treating or preventing inflammatory diseases,
XX e.g. rheumatoid arthritis or for use in antisense gene therapy. This
XX sequenc represents an antisense oligonucleotide used in a method to
XX inhibit p38 MAPK
XX
XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1153 GACATGTGGGCTGTGGGCTG 1172
XX ||||| ||||| ||||| |||||
XX 20 GACATCTGGTCTGTGGCTG 1
XX
XX RESULT 1903
XX ABZ74963
XX ID ABZ74963 standard; DNA; 20 BP.
XX AC ABZ74963;
XX
XX 10-MAY-2003 (first entry)
XX
XX Human p70 S6 kinase phosphorothioate antisense oligo, SEQ ID NO:21.
XX
XX Human; p70 S6 kinase; SK6; p70/p85 S6 kinase; pp70s6k;
XX p70/p85 ribosomal S6 kinase; serine-threonine kinase;
XX ribosomal S6 protein phosphorylation; protein synthesis;
XX cell cycle progression; immune response; signalling cascade;
XX cancer progression; lipotoxic disorder; obesity; metabolic disorder;
XX hyperproliferative disorder; cancer; cytostatic; expression inhibition;
XX phosphorothioate; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages. When bases 1-5 and 16-
XX 20 are not 2'-methoxyethyl (2'-MOE) nucleotides, all
XX cytosines in the oligonucleotide are 5-methylcytosine"
XX modified_base 1..5
XX OS
```

```
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides.
FT All 2' MOE cytosines are 5-methylcytosine"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides.
FT All 2' MOE cytosines are 5-methylcytosine"
XX
XX WO2003012032-A2.
XX
XX 13-FEB-2003.
XX
XX 19-JUL-2002; 2002WO-US023123.
XX
XX 01-AUG-2001; 2001US-00920677.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Cowser LM;
XX WPI; 2003-239516/23.
XX
XX Novel antisense compound which is targeted to nucleic acid encoding p70
XX S6 kinase, and inhibits expression of p70 S6 kinase, useful for treating
XX a condition associated with p70 S6 kinase, e.g. cancer.
XX
XX Claim 3; Page 73; 93pp; English.
XX
XX Sequences ABZ74952-ABZ74991 represent antisense oligonucleotides targeted
XX to the human p70 S6 kinase gene, which inhibit its expression. The
XX antisense oligonucleotides were designed to target different regions of
XX the human p70 S6 kinase RNA, and were analysed for their effect on mRNA
XX levels by quantitative real-time PCR. p70 S6 kinase (also known as SK6,
XX p70/p85 S6 kinase, p70/p85 ribosomal S6 kinase and pp70s6k) is a serine-
XX threonine kinase responsible for the phosphorylation of the ribosomal S6
XX protein, which in turn stimulates protein synthesis. p70 S6 kinase
XX function is essential for cell cycle progression, and has also been
XX implicated in the regulation of the immune response. p70 S6 kinase is
XX itself activated via phosphorylation, a process influenced by upstream
XX signalling cascades and by hyperinsulinaemia, and may play a role in the
XX progression of colon cancer and in the development of lipotoxic disorders
XX and obesity. The oligonucleotides of the invention are useful for the
XX prevention and treatment of conditions associated with p70 S6 kinase,
XX such as hyperproliferative disorders such as cancer, and metabolic
XX disorders. They are also useful in research and diagnostics for
XX modulating the expression of p70 S6 kinase
XX
XX Sequence 20 BP; 1 A; 11 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 561 CCGCCGCTCTCGTGTGTCTCA 580
XX ||||| ||||| ||||| |||||
XX 1 CCGGCTCTCTTCGTGCTCTCA 20
XX
XX RESULT 1904
XX ABT43268
XX ID ABT43268 standard; DNA; 20 BP.
XX AC ABT43268;
XX
XX 22-SEP-2003 (first entry)
XX
XX Neuroblastoma-related DNA sequence #183.
XX
XX Neuroblastoma; prognosis; ds; oligonucleotide.
XX OS Unidentified.
```

```

XX FN WO2002103017-A1.
XX PD 27-DEC-2002.
XX PF 30-MAY-2002; 2002WO-JP005295.
XX PR 31-MAY-2001; 2001JP-00163666.
XX PR 24-AUG-2001; 2001JP-0025260.
XX PA (CHIB-) CHIBA PREFECTURE.
XX PA (HISM ) HISAMITSU PHARM CO LTD.
XX PI Nakagawara A;
XX DR WPI; 2003-167523/16.
XX PT Nucleic acids isolated from neuroblastoma showing enhanced expression in
XX PT human neuroblastoma with good prognosis, useful in clarifying good/poor
XX PT prognosis of neuroblastoma and providing genetic data.
XX PS Example 5; Page 24(1); 444pp; Japanese.
XX CC The invention comprises DNA sequences that show enhanced expression in
XX CC human neuroblastoma with good prognosis. The DNA sequences of the
XX CC invention are useful in clarifying good/poor prognosis of neuroblastoma.
XX CC The present DNA sequence was used in the exemplification of the invention
XX SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 316 TCTGCACCAGAGATTGTCCA 335
DB 1 TCTGCACCAGAGATTGTCCA 20

RESULT 1905
ABQ80265/c
ID ABQ80265 standard; cDNA; 20 BP.
XX AC ABQ80265;
XX DT 27-JUN-2003 (first entry)
XX DE FLT-4 primer #2.
XX KW PCR; nervous system; platelet-derived growth factor; PDGF; psychosis;
XX KW vascular endothelial growth factor; VEGF; neural; stem cell; memory;
XX KW progenitor cell; neurodegeneration; ischaemia; neurological trauma;
XX KW neuropsychiatry; learning; Parkinson's disease; Huntington's disease;
XX KW Amyotrophic Lateral Sclerosis; spinal ischaemia; ischaemic stroke;
XX KW spinal cord injury; cancer-related; schizophrenia; Alzheimer's disease;
XX KW depression; anxiety; phobia; stress; cognitive function; aggression;
XX KW drug; alcohol; abuse; obsessive compulsive behaviour; proliferation;
XX KW seasonal mood disorder; personality disorder; cerebral palsy; priver;
XX KW multi-infarct; dementia; Lewy body; age related; geriatric; growth;
XX KW epilepsy; brain injury; multiple sclerosis; autism; differentiation;
XX KW attention deficit disorder; narcolepsy; amplify; ss.
XX OS Homo sapiens.
XX PN WO2003024478-A1.
XX PD 27-MAR-2003.
XX PF 19-SEP-2002; 2002WO-IB003998.
XX PR 19-SEP-2001; 2001US-0323381P.
XX PR 28-SEP-2001; 2001US-0326044P.
XX

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PA (NEUR-) NEURONOVA AB.
XX Delfani K, Janson AM, Kuhn GH, Plate K, Schanzer A, Wachs F;
XX Zhao M;
XX WPI; 2003-354563/33.
XX PT Use of platelet-derived growth factor, vascular endothelial growth
XX PT factor, or their modulators for modulating neural stem cell or neural
XX PT progenitor cell activity, particularly for treating e.g. Alzheimer's,
XX PT ischemia or stroke.
XX PS Example 11; Page 77; 119pp; English.
XX CC The sequences given in ABQ80256-69 are primers which were used to
XX CC identify the presence of vascular endothelial growth factor (VEGF), or
XX CC the VEGF receptors, Flk1, FLT-1 and FLT-4 in human stem cells (HSC). The
XX CC method of the invention for alleviating or reducing a symptom of a
XX CC disease or disorder of the nervous system comprises administering
XX CC platelet-derived growth factor (PDGF), vascular endothelial growth factor
XX CC (VEGF), a combination of PDGF and VEGF, or a PDGF or VEGF agonist, to a
XX CC patient in order to modulate neural stem cell or neural progenitor cell
XX CC activity in vivo. The method is useful for alleviating or reducing the
XX CC symptoms of a disease or disorder of the nervous system, e.g.
XX CC neurodegenerative disorders, neural stem cell disorders, neural
XX CC progenitor disorders, ischaemic disorders, neurological traumas,
XX CC affective disorders, neuropsychiatric disorders or learning and memory
XX CC disorders. In particular, the method is useful for alleviating or
XX CC treating Parkinson's disease and disorders, Huntington's disease,
XX CC Alzheimer's disease, Amyotrophic Lateral Sclerosis, spinal ischaemia,
XX CC ischaemic stroke, spinal cord injury or cancer-related brain/spinal cord
XX CC injury, schizophrenia and other psychoses, depression, bipolar
XX CC depression/disorder, anxiety syndromes/disorders, phobias, stress and
XX CC related syndromes, cognitive function disorders, aggression, drug and
XX CC alcohol abuse, obsessive compulsive behaviour syndromes, seasonal mood
XX CC disorder, borderline personality disorder, cerebral palsy, life style
XX CC drug, multi-infarct dementia, Lewy body dementia, age related/geriatric
XX CC dementia, epilepsy and injury related to epilepsy, spinal cord injury,
XX CC brain injury, trauma related brain/spinal cord injury, infection and
XX CC treatment related brain/spinal cord tissue injury, inflammation and
XX CC inflammation related brain/spinal cord injury, multiple sclerosis, autism
XX CC deficit disorders, narcolepsy or sleep disorders. The PDGF and/or VEGF,
XX CC is useful in the manufacture of a medicament for alleviating or treating
XX CC these diseases or disorders, accelerating growth of neural stem cells or
XX CC neural progenitor cells, or inducing proliferation or differentiation of
XX CC these cells. This primer gives an estimated band size of 378 bp
XX SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 514 CTGAGAGAGCTGACCCCTCAA 533
DB 20 CTGAGAGAGCTGACCCCTGAA 1

RESULT 1906
ACF33771
ID ACF33771 standard; DNA; 20 BP.
XX AC ACF33771;
XX DT 24-SEP-2003 (first entry)
XX DE Human CREB phosphorothioate antisense oligonucleotide, SEQ ID NO:29.
XX KW Human; CREB; cAMP response element binding protein; CREB1; bZIP;
XX KW basic leucine zipper; transcription factor; intracellular signalling;
XX KW spermatogenesis; circadian rhythm; memory; apoptosis;
XX KW hyperproliferative disorder; cancer; tumour; blood; soft tissue;

```





OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "phosphorothioate linkages, and all cytidine  
 residues are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyls"  
 XX  
 PN WO2003008543-A2.  
 XX  
 PD 30-JAN-2003.  
 XX  
 PF 13-JUL-2002; 2002WO-US022417.  
 XX  
 PR 17-JUL-2001; 2001US-00908147.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Zhang H, Watt AT;  
 XX  
 DR WPI; 2003-239321/23.  
 XX  
 XX New antisense compounds, useful for modulating the expression of BCL2-  
 associated X (BAX) protein or for treating a disease or condition  
 associated with BAX protein, e.g. Parkinson's disease, Hodgkin's disease  
 or Alzheimer's disease.  
 XX  
 PS Example 15; Page 85; 139pp; English.  
 XX  
 CC The present invention describes a compound (I) 8-50 nucleobases in length  
 targeted to a nucleic acid molecule encoding BCL2-associated X (BAX)  
 protein, where the compound specifically hybridises with the nucleic acid  
 molecule encoding BAX protein and inhibits the expression of BAX protein.  
 CC The compound specifically hybridises with at least 8-nucleobase portion  
 of an active site on a nucleic acid molecule encoding BAX protein. Also  
 described: (1) a composition comprising (I) and a pharmaceutical carrier  
 or diluent; (2) inhibiting the expression of BAX protein in cells or  
 tissues comprising contacting the cells or tissues with (I); and (3)  
 treating an animal having a disease or condition associated with BAX  
 protein comprising administering to the animal (I) so that expression of  
 BAX protein is inhibited. (I) has nontropic, neuroprotective,  
 antiparkinsonian, anticonvulsant, ophthalmological, antidiabetic and  
 antagonist. The antisense compounds (I) are useful for modulating the  
 expression of BAX protein, and for treating a disease or condition  
 associated with BAX protein, e.g. familial amyotrophic lateral  
 sclerosis, Alzheimer's disease, Parkinson's disease, Hodgkin's disease,  
 cartilage-hair hyperplasia, diabetes-associated ocular disorders or  
 scrapie infection, or a condition that arises from aberrant apoptosis.  
 CC The compounds are useful as research reagents and in diagnostics. The  
 present sequence represents a human BAX chimeric phosphorothioate  
 CC oligonucleotide, which is used in an example from the present invention.  
 XX  
 SQ Sequence 20 BP; 2 A; 8 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 Qy 77 GAGGGCCCCGGCTCTGAG 96  
 Db 20 GGGGGCCCCACCAGCTCTGAG 1

RESULT 1909  
 ADA20960  
 ID ADA20960 standard; DNA; 20 BP.  
 XX  
 AC ADA20960;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Mouse BAX chimeric phosphorothioate oligonucleotide SEQ ID NO:133.  
 XX  
 KW BCL2-associated X; BAX; nontropic; neuroprotective; antiparkinsonian;  
 anticonvulsant; ophthalmological; antidiabetic; virucide;  
 KW antisense therapy; BAX antagonist; BAX inhibitor;  
 KW familial amyotrophic lateral sclerosis; Alzheimer's disease;  
 KW Parkinson's disease; Hodgkin's disease; cartilage-hair hyperplasia;  
 KW diabetes-associated ocular disorder; scrapie infection;  
 KW aberrant apoptosis; mouse; phosphorothioate; ss.  
 XX  
 OS Synthetic.  
 OS Mus musculus.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "phosphorothioate linkages, and all cytidine  
 residues are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyls"  
 XX  
 PN WO2003008543-A2.  
 XX  
 PD 30-JAN-2003.  
 XX  
 PF 13-JUL-2002; 2002WO-US022417.  
 XX  
 PR 17-JUL-2001; 2001US-00908147.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Zhang H, Watt AT;  
 XX  
 DR WPI; 2003-239321/23.  
 XX  
 XX New antisense compounds, useful for modulating the expression of BCL2-  
 associated X (BAX) protein or for treating a disease or condition  
 associated with BAX protein, e.g. Parkinson's disease, Hodgkin's disease  
 or Alzheimer's disease.  
 XX  
 PS Example 17; Page 94; 139pp; English.  
 XX  
 CC The present invention describes a compound (I) 8-50 nucleobases in length  
 targeted to a nucleic acid molecule encoding BCL2-associated X (BAX)  
 protein, where the compound specifically hybridises with the nucleic acid  
 molecule encoding BAX protein and inhibits the expression of BAX protein.  
 CC The compound specifically hybridises with at least 8-nucleobase portion  
 of an active site on a nucleic acid molecule encoding BAX protein. Also  
 described: (1) a composition comprising (I) and a pharmaceutical carrier  
 or diluent; (2) inhibiting the expression of BAX protein in cells or  
 tissues comprising contacting the cells or tissues with (I); and (3)  
 treating an animal having a disease or condition associated with BAX  
 protein comprising administering to the animal (I) so that expression of  
 BAX protein is inhibited. (I) has nontropic, neuroprotective,  
 antiparkinsonian, anticonvulsant, ophthalmological, antidiabetic and  
 antagonist. The antisense compounds (I) are useful for modulating the  
 expression of BAX protein, and for treating a disease or condition  
 associated with BAX protein, e.g. Parkinson's disease, Hodgkin's disease  
 or Alzheimer's disease.

such as transplant rejection, Alzheimer's disease, or multiple sclerosis or infection.

Example 15; Page 84; 129pp; English.

The present invention describes a compound (I) that is 8-50 nucleobases in length: (a) targets a nucleic acid molecule encoding major histocompatibility complex (MHC) class II transactivator, and specifically hybridises with the nucleic acid encoding the MHC class II transactivator, and inhibits the expression of MHC class II transactivator; or (b) specifically hybridises with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding MHC class II transactivator. (I) has immunosuppressive, antimicrobial, antidiabetic, antirheumatic, antiarthritic, cytostatic, neurotropic, neuroprotective and immunostimulant activities, and can be used as an MHC class II transactivator inhibitor. The MHC class II transactivator antisense oligonucleotides can be used for treating an animal having a disease or condition associated with MHC class II transactivator, e.g. autoimmune disorder or infection. The antisense oligonucleotides can be used for inhibiting the expression of MHC class II transactivator in cells or tissues. In particular, these diseases include transplant rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease, multiple sclerosis, or severe combined immunodeficiency disease. The antisense compounds are useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence represents a human MHC class II transactivator chimeric phosphorothioate antisense oligonucleotide, which is used in an example from the present invention

Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps

QY 865 AAGCAGTACTGGATGACTG 884  
||| ||||| ||||| |||  
Db 1 AAGCTGAACCTGGATGGCAG 20

RESULT 1911

AAL61864

ID AAL61864 standard; DNA; 20 BP.

AC AAL61864;

DT 22-SEP-2003 (first entry)

DE Human ETBR-LP-2 antisense oligonucleotide ISIS #204290.

XX Human; G protein-coupled receptor; hyperproliferative disorder; GPR37L1;  
KW endothelin type b receptor-like protein-2; cerebral vascular disease;  
KW antisense; endothelin-binding receptor-like protein-2; atherosclerosis;  
KW cardiovascular disease; ETBR-LP-2; G-protein coupled receptor 37 like 1;  
KW acute proliferative nephropathy; ETBR-like protein 2; cancer; stroke;  
KW angiogenesis; hypertension; phosphorothioate; ss.

XX Homo sapiens.  
OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidine residues  
FT are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

```
XX PN WO2003050244-A2.
XX PD 19-JUN-2003.
XX PF 04-DEC-2002; 2002WO-US038520.
XX PR 06-DEC-2001; 2001US-00003126.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Freier SM;
XX XX WPI; 2003-558997/52.
XX
XX PT New oligonucleotides which bind the nucleic acid encoding the G protein
XX PT coupled receptor ETBR-LP-2 (endothelin type b receptor-like protein-2
XX PT receptor), useful for treating e.g. cancer and cardiovascular diseases.
XX PS Claim 3; Page 80; 106pp; English.
XX CC The invention relates to antisense compounds targetted to the nucleic
XX CC acid encoding the G protein-coupled receptor ETBR-LP-2 (endothelin type b
XX CC receptor-like protein-2) to inhibit its expression. ETBR-LP-2 is also
XX CC known as endothelin-binding receptor-like protein-2, ETBR-like protein 2
XX CC and G-protein coupled receptor 37 like 1 (GPR37L1). Antisense compounds
XX CC of the invention are useful for treating hyperproliferative disorders
XX CC (especially cancer) and cardiovascular diseases especially angiogenesis,
XX CC atherosclerosis, hypertension, cerebral vascular disease, stroke and
XX CC acute proliferative nephropathy. The present sequence is an antisense
XX CC oligonucleotide targetted to human ETBR-LP-2 DNA
XX SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1049 GAGCCAAAGTCAATCCCAACA 1068
DB 1 GAACCAAGTCCATCCTCTAGA 20
RESULT 1912
AAL61863
ID AAL61863 standard; DNA; 20 BP.
AC AAL61863;
XX
XX DT 22-SEP-2003 (first entry)
XX DE Human ETBR-LP-2 antisense oligonucleotide ISIS #204289.
XX KW Human; G protein-coupled receptor; hyperproliferative disorder; GPR37L1;
XX KW endothelin type b receptor-like protein-2; cerebral vascular disease;
XX KW antisense; endothelin-binding receptor-like protein-2; atherosclerosis;
XX KW cardiovascular disease; ETBR-LP-2; G-protein coupled receptor 37 like 1;
XX KW acute proliferative nephropathy; ETBR-like protein 2; cancer; stroke;
XX KW angiogenesis; hypertension; phosphorothioate; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone; All cytidine residues
XX FT are 5-methylcytidines"
XX modified_base 1..5
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
```

```
FT modified_base 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX PN WO2003050244-A2.
XX XX 19-JUN-2003.
XX PD 04-DEC-2002; 2002WO-US038520.
XX PF 06-DEC-2001; 2001US-00003126.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Monia BP, Freier SM;
XX XX WPI; 2003-558997/52.
XX
XX PT New oligonucleotides which bind the nucleic acid encoding the G protein
XX PT coupled receptor ETBR-LP-2 (endothelin type b receptor-like protein-2
XX PT receptor), useful for treating e.g. cancer and cardiovascular diseases.
XX PS Example 15; Page 80; 106pp; English.
XX CC The invention relates to antisense compounds targetted to the nucleic
XX CC acid encoding the G protein-coupled receptor ETBR-LP-2 (endothelin type b
XX CC receptor-like protein-2) to inhibit its expression. ETBR-LP-2 is also
XX CC known as endothelin-binding receptor-like protein-2, ETBR-like protein 2
XX CC and G-protein coupled receptor 37 like 1 (GPR37L1). Antisense compounds
XX CC of the invention are useful for treating hyperproliferative disorders
XX CC (especially cancer) and cardiovascular diseases especially angiogenesis,
XX CC atherosclerosis, hypertension, cerebral vascular disease, stroke and
XX CC acute proliferative nephropathy. The present sequence is an antisense
XX CC oligonucleotide targetted to human ETBR-LP-2 DNA
XX SQ Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1052 CCAAGTCAATCCCAACAAG 1071
DB 1 CCAAGTCCATCCTCTAGACAG 20
RESULT 1913
ACD99549/c
ID ACD99549 standard; DNA; 20 BP.
XX AC ACD99549;
XX XX 25-SEP-2003 (first entry)
XX DT Immunostimulatory nucleic acid #235.
XX DE Immunostimulatory nucleic acid #235.
XX KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
XX KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
XX KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
XX KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX OS Synthetic.
XX XX US2003050268-A1.
XX PN 13-MAR-2003.
XX PD 29-MAR-2002; 2002US-00112653.
XX PF 29-MAR-2001; 2001US-0279642P.
XX PR (KRIE/) KRIEG A M.
XX PA
```





```
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX
PI Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusia AJ;
PI Ohmen J, Ross D, Tafari S, Wu C;
XX
DR WPI; 2003-695901/66.
XX
PT Novel human FCHL1 or mouse HYPLIPI polypeptide, useful for drug
PT screening, peptide therapy of lipid disorder or cancer.
XX
PS Claim 11; Page 38; 56pp; English.
XX
CC The invention describes an isolated polypeptide (I) comprising a variant
CC form of a mouse HYPLIPI polypeptide sequence (S1) or a human FCHL1
CC polypeptide sequence (S2), not given in the specification, where the
CC variant form is associated with cancer, or an amino acid sequence having
CC at least 65 % sequence identity to (S1) or (S2). A composition comprising
CC DNA encoding (I) is useful for treating or preventing cancer associated
CC with expression of FCHL1. FCHL1 gene or HYPLIPI gene and its product are
CC useful for the study of metabolic pathway and cellular mechanism to
CC identify other genes, receptors and relationships that contribute to
CC lipid disorder and cancer. FCHL1 gene or its fragments are useful in gene
CC therapy to increase the amount of the expression products of the gene for
CC the treatment of lipid disorder or cancerous cells. The sequence
CC variation of FCHL1 gene or HYPLIPI gene is also useful in the diagnosis
CC and prognosis of predisposition to lipid disorder and cancer. Antisense
CC polynucleotide sequences are useful in preventing or diminishing the
CC expression of HYPLIPI or FCHL1 locus. This sequence represents a primer
CC used in the analysis of the mouse HYPLIPI gene.
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 16 GGATGGACAGGAGTGCAGAG 35
DB 20 GGATGGAGAGGCATCTGAG 1

RESULT 1918
ADB36618/c
ID ADB36618 standard; DNA; 20 BP.
XX
AC ADB36618;
XX
DT 04-DEC-2003 (first entry)
DE Immunostimulatory nucleic acid #232.
XX
KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
OS Synthetic.
XX
EN US2003087848-A1.
XX
FD 08-MAY-2003.
XX
PF 02-FEB-2001; 2001US-00776479.
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
PA (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DM, Fouron Y;

XX (LUSI/) LUSIS A J.
XX (OHME/) OHMEN J.
XX (ROSS/) ROSS D.
XX (TAFU/) TAFURI S.
XX (WUCC/) WU C.
XX
WPI; 2003-657977/62.
Treating and/or preventing allergy or asthma using an immunostimulatory
nucleic acid alone or in combination with an asthma/allergy medicament.
Disclosure; Page 8; 221pp; English.
The invention relates to a method of treating or preventing allergy or
asthma which comprises administering to a subject a poly-G nucleic acid
in an aerosol formulation. The methods and compositions of the present
invention are useful for diagnosing and/or treating asthma and allergy
especially in a hypo-responsive subject. The present sequence represents
an immunostimulatory nucleic acid of the invention.
Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 555 CCTCAGCCGCCGCTCGTC 574
DB 20 CCGCCGCCGCCGCCGCC 1

RESULT 1919
ADB65935/c
ID ADB65935 standard; DNA; 20 BP.
XX
AC ADB65935;
XX
DT 04-DEC-2003 (first entry)
DE Clone specific PCR primer #136.
XX
KW Pharmaceutical; diagnostic; gene therapy; tissue regeneration;
KW cell regeneration; membrane protein; signal transduction-related protein;
KW transcription-related protein; osteoporosis; neurological disease;
KW cancer; tumour; primer; PCR; ss.
XX
OS Homo sapiens.
XX
EN EP1308459-A2.
XX
PD 07-MAY-2003.
XX
PF 28-MAR-2002; 2002EP-00007401.
XX
PR 05-NOV-2001; 2001JP-00379298.
XX
PR 25-JAN-2002; 2002US-00350978.
XX
PA (HELI-) HELIX RES INST.
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Tamechika I;
PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
XX
WPI; 2003-450961/43.
New polynucleotides and polypeptides, useful for developing a diagnostic
marker or medicines for regulation of their expression and activity, or
as targets of gene therapy.
Example 8; Page 129; 222pp; English.
The invention discloses a polynucleotide comprising a sequence selected
from 1970 fully defined nucleotide sequences which encode novel
polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
or its partial peptide, an antibody binding to the polypeptide or
of the polynucleotide, immunologically assaying the polypeptide or
peptide of the polynucleotide by contacting the polypeptide or peptide
```

CC with the antibody of the encoded protein, and observing the binding  
 CC between the two, a transformant carrying the polynucleotide in an  
 CC expressible manner and an antisense polynucleotide. The oligonucleotide  
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe  
 CC for detecting the polynucleotide. The polynucleotides and encoded  
 CC proteins are useful as pharmaceutical agents and many disease-related  
 CC genes may be included in them, for developing a diagnostic marker or  
 CC medicines for regulation of their expression and activity, or as targets  
 CC of gene therapy. The genes are involved in tissue and/or cell  
 CC regeneration. Membrane proteins, signal transduction-related proteins,  
 CC transcription-related proteins, disease-related proteins and genes  
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,  
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate  
 CC the activity or expression of the encoded protein to treat diseases. The  
 CC sequence presented is clone specific PCR primer which was used in the  
 CC expression analysis of the genes of the invention. Note: Some of the  
 CC sequence data for this patent is not represented in the printed  
 CC specification, but is based on sequence information supplied by the  
 CC European Patent Office.

XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 154 CTGTCAATGACACTCCGAGG 173  
 ||||| ||||| ||||| ||  
 Db 20 CTGTCACTGACTCTCTCTTG 1

RESULT 1920  
 ADC65807  
 ID ADC65807 standard; DNA; 20 BP.  
 XX AC ADC65807;

DT 18-DEC-2003 (first entry)

DE Mouse TGF-beta receptor II targeted antisense oligonucleotide #6.

XX mouse; antisense oligonucleotide;  
 KW transforming growth factor beta receptor II; TGF-beta receptor II;  
 KW hyperproliferative disorder; breast cancer; autoimmune disorder;  
 KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;  
 XX phosphorothioate backbone; ss; murine.

OS Mus musculus.

PN WO2003000656-A2.

XX 03-JAN-2003.

XX 19-JUN-2002; 2002WO-US019665.

XX 21-JUN-2001; 2001US-00888361.

XX (ISIS-) ISIS PHARM INC.

XX Murray SF, Wyatt JR;

XX WPI, 2003-175279/17.

XX New compound having a sequence targeted to a nucleic acid encoding  
 PT Transforming growth factor beta-receptor II, useful for preparing a  
 PT composition for treating hyperproliferative disorder e.g., lung, liver,  
 PT colon or gastric cancer.

XX Claim 3; SEQ ID NO 103; 141pp; English.

XX The invention comprises antisense oligonucleotides that are targeted to  
 CC the nucleic acid encoding transforming growth factor beta (TGF-beta)  
 CC receptor II. The antisense oligonucleotides of the invention are useful

CC for treating: hyperproliferative disorders (e.g. breast cancer), or an  
 CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence  
 CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a  
 CC phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.

XX Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 108 GCCCCGCGCGATCGCATGG 127  
 ||||| ||||| ||||| ||  
 Db 1 GCCCCGTCGCTCGTCATAG 20

RESULT 1921  
 ADC10516/c  
 ID ADC10516 standard; DNA; 20 BP.

XX AC ADC10516;

DT 18-DEC-2003 (first entry)

DE Human NOVX polypeptide gene forward primer SEQ ID NO: 535.

XX ss; primer; cytostatic; antidiabetic; anorectic; cerebroprotective;  
 KW neuroprotective; antiinflammatory; gene therapy; antisense therapy;  
 KW thymimetic; NOVX; pathology; cancer; diabetes; obesity;  
 KW endocrine disorder; CNS disorder; inflammatory disorder;  
 KW chromosome mapping; tissue typing; predictive medicine.

XX Homo sapiens.

XX WO2003000842-A2.

XX 03-JAN-2003.

XX 04-JUN-2002; 2002WO-US017443.

XX 04-JUN-2001; 2001US-0295607P.

XX 06-JUN-2001; 2001US-0296404P.

XX 07-JUN-2001; 2001US-0296418P.

XX 11-JUN-2001; 2001US-0296575P.

XX 12-JUN-2001; 2001US-0297414P.

XX 12-JUN-2001; 2001US-0295573P.

XX 14-JUN-2001; 2001US-0297567P.

XX 15-JUN-2001; 2001US-0298285P.

XX 18-JUN-2001; 2001US-0299133P.

XX 19-JUN-2001; 2001US-0299230P.

XX 21-JUN-2001; 2001US-029949P.

XX 22-JUN-2001; 2001US-0300177P.

XX 26-JUN-2001; 2001US-0300883P.

XX 28-JUN-2001; 2001US-0301530P.

XX 03-JUL-2001; 2001US-0301550P.

XX 31-JUL-2001; 2001US-030890P.

XX 14-SEP-2001; 2001US-0322297P.

XX 25-SEP-2001; 2001US-0324659P.

XX 03-DEC-2001; 2001US-0337477P.

XX 14-DEC-2001; 2001US-0341562P.

XX 21-FEB-2002; 2002US-0358656P.

XX 21-FEB-2002; 2002US-0359122P.

XX 22-FEB-2002; 2002US-0358378P.

XX 22-FEB-2002; 2002US-0359034P.

XX 22-FEB-2002; 2002US-0359035P.

XX 22-FEB-2002; 2002US-0359121P.

XX 01-MAR-2002; 2002US-0360858P.

XX 12-MAR-2002; 2002US-0363430P.

XX 12-MAR-2002; 2002US-0363676P.

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PR 10-APR-2002; 2002US-0371346P.
PR 10-MAY-2002; 2002US-0379444P.
PR 04-JUN-2002; 2002US-00379444.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton B;
XX PI Dipippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA;
XX PI Gerlach VL, Gorman L, Guo X, Herrmann JL, Hjalt T, Ji W, Kekuda R;
XX PI Khrantsov NV, Li L, Liu X, Malvankar UM, Miller CE, Millet I;
XX PI Ort T, Padigaru M, Patturajan M, Pena CE, Rastelli L, Rieger DK;
XX PI Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G, Spaderna SK;
XX PI Spytek KA, Stone DJ, Vernet CAM, Zhong H, Zhong M, Alsobrook JP;
XX PI Burgess CE, Lepley DM;
XX
XX WPI; 2003-210149/20.
XX
XX New isolated NOVX polypeptides and nucleic acid molecules useful for
XX PT treating, preventing and diagnosing pathological conditions with NOVX-
XX PT associated disorders, such as cancer, obesity, diabetes and inflammatory
XX PT or CNS diseases.
XX
XX Example B; SEQ ID NO 535; 772pp; English.
XX
XX The invention relates to novel isolated polypeptides, mature form of the
XX CC polypeptide, a sequence that is 95% identical to the polypeptide or the
XX CC polypeptide comprising one or more conservative substitutions. The NOVX
XX CC polypeptide is useful for treating or preventing a pathology associated
XX CC with the polypeptide e.g. disorders associated with aberrant expression
XX CC or activity of the polypeptide, such as cancer, diabetes, obesity, and
XX CC endocrine, CNS and inflammatory disorders. They can also be used in
XX CC various detection and screening assays, chromosome mapping, tissue typing
XX CC and predictive medicine. This sequence corresponds to a primer used to
XX CC amplify and isolate the coding sequence for one of the polypeptides of
XX CC the invention.
XX
XX Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1022 TCAGCTGGCTGACTTTGGC 1041
DB 20 TGAAGATTGCTGACTTCGC 1

RESULT 1922
ADC38989/c
ID ADC38989 standard; DNA; 20 BP.
XX
XX ADC38989;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human ICAM-1 targeted primer #15.
XX
XX ss; primer; immunosuppressive; antisense therapy;
XX KW corneal allograft rejection; intercellular adhesion molecule-1; ICAM-1;
XX KW extracellular adhesion molecule-1; ELAM-1;
XX KW vascular cell adhesion molecule-1; VCAM-1; corneal explant.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX Key Location/Qualifiers
XX misc_difference 1..20
XX /tag= a
XX /note= "all internucleotide linkages are phosphodiester
XX bonds"
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX

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FT /note= "OTHER = all A, C and U are 2'-fluoro bases or 2'-
FT O-methyl"
XX
XX WO2003032920-A2.
XX
XX 24-APR-2003.
XX
XX 16-OCT-2002; 2002WO-US033236.
XX
XX 18-OCT-2001; 2001US-00982262.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Mirabelli CK;
XX
XX WPI; 2003-403142/38.
XX
XX Inhibiting corneal allograft rejection, by contacting an allograft with a
XX PT formulation having an oligonucleotide targeted to intercellular adhesion
XX PT molecule-1, extracellular adhesion molecule-1 or vascular cell adhesion
XX PT molecule-1.
XX
XX Example 5; SEQ ID NO 15; 106pp; English.
XX
XX The invention relates to a method of inhibiting corneal allograft
XX CC rejection, by contacting the allograft with a topical formulation
XX CC comprising an antisense oligonucleotide targeted to intercellular
XX CC adhesion molecule-1 (ICAM-1), extracellular adhesion molecule-1 (ELAM-1)
XX CC or vascular cell adhesion molecule-1 (VCAM-1). The oligonucleotide is
XX CC useful for inhibiting corneal allograft rejection or for preserving a
XX CC corneal explant ex vivo, where the explant is human. This sequence
XX CC corresponds to one of the oligonucleotide of the invention.
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGGTGGTGGTGGCGG 245
DB 20 GAGAGGGGAAGTGGTGGCGG 1

RESULT 1923
AAD58980/c
ID AAD58980 standard; DNA; 20 BP.
XX
XX AAD58980;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human ICAM-1 antisense oligo, ISIS 1939.
XX
XX Inflammatory bowel disorder; ulcerative colitis; Crohn's disease;
XX KW cellular proliferation; intracellular adhesion molecule; ICAM-1;
XX KW phosphorothioate backbone; antisense; human; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
XX
XX US2003040497-A1.
XX
XX 27-FEB-2003.
XX
XX 21-DEC-2001; 2001US-00029598.
XX
XX

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PR 01-JUL-1997; 97US-00868829.
PR 01-JUL-1998; 98US-00108673.
PR 20-MAY-1999; 99US-00315298.
XX
PA (TENG/) TENG C.
PA (COOK/) COOK P. D.
PA (TILL/) TILLMAN L.
PA (HARD/) HARDEE G E.
PA (ECKER/) ECKER D J.
PA (MANO/) MANOHARAN M.
XX
PI Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
XX WPI; 2003-596370/56.
XX
XX Formulation, useful for treating inflammatory bowel disorder, e.g.
PT ulcerative colitis or Crohn's disease, comprises oligonucleotide for
PT rectal delivery.
XX
PS Example 2; Page 7; 45pp; English.
XX
XX The invention relates to formulations and methods which enhance the local
CC and systemic uptake and delivery of oligonucleotides and nucleic acids
CC via non-parenteral routes of administration. The formulation is used for
CC treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's
CC disease or inflammatory bowel disease, in animals (e.g. human). It can
CC also be used for treating undue cellular proliferation. The present
CC sequence is an antisense oligonucleotide targeted to human intracellular
CC adhesion molecule (ICAM-1) gene. This sequence is used to illustrate the
CC method of the invention
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 226 GAGAGTGTGTGTGTGGCGG 245
DB 20 GAGAGGGGGAAGTGTGTGGGG 1
XX
RESULT 1924
AAD59446
ID AAD59446 standard; DNA; 20 BP.
XX
AC AAD59446;
XX
XX 18-DEC-2003 (first entry)
XX
XX AS-ipfk-2 (A) antisense phosphorothioate oligonucleotide.
XX
XX Cytostatic; immunomodulator; phosphofructokinase isozyme; ipfk; cancer;
XX inflammation; cachexia; enzyme linked immunosorbant assay; ELISA;
XX therapy; phosphorothioate; antisense; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX
XX US6596851-B1.
XX
XX 22-JUL-2003.
XX
XX 25-SEP-2000; 2000US-00670216.
XX
XX 31-OCT-1997; 97US-00961578.
XX 30-OCT-1998; 98US-00183846.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI; 2003-743054/70.
XX
XX New antibody that binds to an epitope of an inducible human
PT phosphofructokinase-2 isozyme, useful for diagnosing or treating cancer,
PT inflammation or cachexia.
XX
PS Example 3; Col 10; 31pp; English.
XX

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PA (PICO-) PICOWER INST MEDICAL RES.
XX
PI Bucala RJ, Chesney JA, Mitchell RA;
XX
XX WPI; 2003-743054/70.
XX
XX New antibody that binds to an epitope of an inducible human
PT phosphofructokinase-2 isozyme, useful for diagnosing or treating cancer,
PT inflammation or cachexia.
XX
PS Example 3; Col 10; 31pp; English.
XX
XX The present invention relates to an isolated antibody that binds to an
CC epitope of an inducible human phosphofructokinase-2 (ipfk-2) isozyme. The
CC antibody is useful for treating cancer, inflammation and cachexia. The
CC antibody can also be used in enzyme linked immunosorbant assay (ELISA)
CC immunological assays. The present sequence is AS-ipfk-2 antisense
CC phosphorothioate oligonucleotide
XX
SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1679 CCAACTACATCTTCCTCGGT 1698
DB 1 CCAACGGCATCTTCGGGCT 20
XX
RESULT 1925
AAD59445/c
ID AAD59445 standard; DNA; 20 BP.
XX
AC AAD59445;
XX
XX 18-DEC-2003 (first entry)
XX
XX S-ipfk-2 (A) sense phosphorothioate oligonucleotide.
XX
XX Cytostatic; immunomodulator; phosphofructokinase isozyme; ipfk; cancer;
XX inflammation; cachexia; enzyme linked immunosorbant assay; ELISA;
XX therapy; phosphorothioate; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX
XX US6596851-B1.
XX
XX 22-JUL-2003.
XX
XX 25-SEP-2000; 2000US-00670216.
XX
XX 31-OCT-1997; 97US-00961578.
XX 30-OCT-1998; 98US-00183846.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI; 2003-743054/70.
XX
XX New antibody that binds to an epitope of an inducible human
PT phosphofructokinase-2 isozyme, useful for diagnosing or treating cancer,
PT inflammation or cachexia.
XX
PS Example 3; Col 10; 31pp; English.
XX

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CC The present invention relates to an isolated antibody that binds to an  
 CC epitope of an inducible human phosphofructokinase-2 (iPFK-2) isozyme. The  
 CC antibody is useful for treating cancer, inflammation and cachexia. The  
 CC antibody can also be used in enzyme linked immunosorbent assay (ELISA)  
 CC immunological assays. The present sequence is S-iPFK-2 sense  
 CC phosphorothioate oligonucleotide

XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1679 CCAACTACATCTCTCTGCT 1698

Db 20 CCAAGGCATCTTCGGGCT 1

RESULT 1926

ADD22540

ID ADD22540 standard; DNA; 20 BP.

AC ADD22540;

XX 15-JAN-2004 (first entry)

DT Flatfish rhabdovirus oligo #31.

DE DNA vaccine; flatfish rhabdovirus; HIRRV; fish; immunity;

KW transcriptional-control; cytomagalovirus immediate-type promoter;

KW immunogenic; virucide; gene gun; ss; primer.

XX Hirame rhabdovirus.

OS JP2003155254-A.

XX 27-MAY-2003.

XX 26-SEP-2001; 2001JP-00294473.

XX 06-SEP-2001; 2001JP-00271068.

PR 10-SEP-2001; 2001JP-00274202.

XX (MEIJ ) MEIJI SEIKA KAISHA LTD.

PA (AOKI/) AOKI H.

XX WPI; 2003-818526/77.

XX DNA vaccine for flatfish rhabdovirus infected fishes has DNA construct  
 PT comprising a transcriptional control sequence coupled to a nucleotide  
 PT sequence encoding an immunogenic protein of flatfish rhabdovirus.  
 XX Example 6; Fig 5; 13pp; Japanese.

XX The invention relates to a novel DNA vaccine for flatfish rhabdovirus  
 CC (HIRRV) infected fishes, which provides immunity against HIRRV. The  
 CC vaccination method uses a DNA construct comprising a transcriptional-  
 CC control sequence containing cytomagalovirus immediate-type promoter,  
 CC operably coupled to a nucleotide sequence encoding an immunogenic  
 CC polypeptide of HIRRV. The DNA vaccine has virucide activity. The HIRRV  
 CC DNA vaccine is useful for administering to a fish belonging to the  
 CC flatfish family by gene gun. The HIRRV DNA vaccine is useful for inducing  
 CC immune response in fish infected by HIRRV and is also useful for  
 CC preventing HIRRV infection in flatfish. The HIRRV DNA vaccine is  
 CC effective in enhancing immunity of fish infected by HIRRV. This  
 CC polynucleotide sequence represents an oligo used in the analysis of the  
 CC mRNA expression level from the muscles of flatfish, following an  
 CC inoculation with the flatfish rhabdovirus vaccine of the invention.

XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1561 TCGATGCTGCTACTCAGCAG 1580

Db 1 TCGATGCTGCTCAGAAAG 20

RESULT 1927

ADD68463

ID ADD68463 standard; DNA; 20 BP.

AC ADD68463;

XX 15-JAN-2004 (first entry)

DT SNP typing-related PCR primer - SEQ ID 20.

DE single nucleotide polymorphism; SNP; typing; PCR; primer; ss.

XX Unidentified.

OS JP2002300894-A.

XX 15-OCT-2002.

XX 29-JAN-2002; 2002JP-00019752.

XX 01-FEB-2001; 2001JP-00025700.

XX (RIKA ) RIKAGAKU KENKYUSHO.

XX WPI; 2003-397221/38.

XX A typing method for single nucleotide polymorphism (SNP) of several  
 PT hundred thousands of SNP sites with comparatively a small amount of  
 PT genome DNA.  
 XX Example 2; SEQ ID NO 20; 45pp; Japanese.

XX The invention relates to a novel method for typing a single nucleotide  
 CC polymorphism (SNP) using a small amount of genomic DNA comprising  
 CC simultaneous amplification of plural base sequences containing one or  
 CC more SNP sites and differentiation of the bases within the SNP sites. The  
 CC method of the invention may be useful for typing several hundred thousand  
 CC SNP sites using only a comparatively small amount of genomic DNA. The  
 CC current sequence is that of the SNP typing-related PCR primer of the  
 CC invention.

XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 765 GCTCAGGACCTCAACACG 784

Db 1 GCTCAGGACCTCGAGACG 20

RESULT 1928

ADFI8650

ID ADFI8650 standard; DNA; 20 BP.

AC ADFI8650;

XX 12-FEB-2004 (first entry)

DT Mouse X-box binding potential XBPl specific primer mXbpl-354.

DE Mouse; X-box binding potential; XBPl; neuroprotective; nootropic;  
 KW respiratory; immunosuppressive; neuroprotective; mydriatic;  
 KW antiinflammatory; dermatological; antiarthritic;  
 KW unfolded protein response; PCR; primer; ss.

```

XX OS Mus sp.
XX PN WO2003089622-A2.
XX XX
XX PD 30-OCT-2003.
XX PF 22-APR-2003; 2003WO-US012640.
XX PR 22-APR-2002; 2002US-0375098P.
XX PR 23-APR-2002; 2002US-0374880P.
XX XX
XX PA (UNMI ) UNIV MICHIGAN.
XX PI Kaufman RJ, Kyungo L, Kazutoshi M;
XX XX WPI; 2003-845532/78.
XX XX
XX PT New nucleic acid molecule modulating unfolded protein response, useful
XX PT for diagnosing or treating protein conformational disorders, such as
XX PT cystic fibrosis, alpha-antitrypsin deficiency, multiple sclerosis, lupus
XX PT and arthritis.
XX XX
XX PS Example 2; SEQ ID NO 5; 126pp; English.
XX XX
XX CC The present sequence is that of PCR primer mXbp1-354, which is specific
XX CC to mouse X-box binding potential (mXBP1). It was used with primers mXbp1-
XX CC 804-AS ADF18651 and mXbp1-1150-R1 ADF18652 in an RT-PCR analysis of RNA
XX CC isolated from tunicamycin-treated wild-type and IRE1-alpha-null murine
XX CC embryonic fibroblasts. The primers were designed to amplify the region
XX CC encompassing the overlap between ORF1 and ORF2. The PCR demonstrated that
XX CC Xbp1 mRNA splicing is induced by endoplasmic reticulum (ER) stress and
XX CC requires IRE1-alpha. Spliced XBP1 mRNA ADF18646 can activate the unfolded
XX CC protein response (UPR) to treat protein conformational diseases and
XX CC disorders. Diagnostic targets and therapeutic agents to enhance protein
XX CC folding capabilities and limit the folding load on the ER are provided.
XX CC Methods and compositions are provided for the treatment and diagnosis of
XX CC protein conformational diseases or disorders, including alphas-
XX CC antitrypsin deficiency, cystic fibrosis, and autoimmune diseases and
XX CC disorders such as multiple sclerosis, muscular dystrophy, lupus and
XX CC arthritis. Also provided are methods for modulating the UPR by modulating
XX CC XBP1 mRNA splicing.
XX SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 834 CCTTGCTTTTGAGTACCTGG 853
Db 1 CCTTGCTTTGAGAACCCAGG 20

RESULT 1929
ADFL1610/c
ID ADF11610 standard; DNA; 20 BP.
XX XX
XX AC ADF11610;
XX XX
XX DT 12-FEB-2004 (first entry)
XX XX
XX DE Bovine pregnancy associated glycoprotein primer #6.
XX XX
XX KW pregnancy; bovine; pregnancy associated glycoprotein; BoPAG;
XX KW progesterone; animal breeding; primer; ss.
XX XX
XX OS Synthetic.
XX XX
XX PN WO2003043524-A2.
XX XX
XX PD 30-MAY-2003.
XX XX

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PF 20-NOV-2002; 2002WO-US037236.
XX XX
XX PR 20-NOV-2001; 2001US-0331822P.
XX XX
XX PA (UMOR ) UNIV MISSOURI.
XX PA (MONS ) MONSANTO TECHNOLOGY LLC.
XX PI Lucy MC, Mathialagan N;
XX XX WPI; 2003-482384/45.
XX DR
XX PT Early pregnancy detection in animals comprises obtaining a sample from
XX PT the animal and measuring the levels of progesterone and bovine pregnancy
XX PT associated glycoprotein in the sample.
XX XX
XX PS Disclosure; SEQ ID NO 21; 102pp; English.
XX XX
XX CC The invention relates to the early detection of pregnancy in a bovine
XX CC animal by obtaining a sample from the bovine animal, measuring the level
XX CC of at least one bovine pregnancy associated glycoprotein (BoPAG) in the
XX CC sample, and measuring the level of progesterone in the sample, where
XX CC elevated levels of BoPAG and progesterone indicate that the bovine animal
XX CC is pregnant. The method is useful in accurate early stage pregnancy
XX CC detection in animals and in increasing the efficiency of commercial
XX CC animal breeding programs. This sequence corresponds to a BoPAG-associated
XX CC PCR primer.
XX SQ Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 667 GGC AAAAGCAAGCTCAGACA 686
Db 20 GGC AAAAGCAAGCTCAGAAA 1

RESULT 1930
ADFO9715/c
ID ADF09715 standard; DNA; 20 BP.
XX XX
XX AC ADF09715;
XX XX
XX DT 12-FEB-2004 (first entry)
XX XX
XX DE Human c-raf kinase antisense oligonucleotide seq id 11.
XX XX
XX KW tumour metastasis; human; raf; raf expression inhibitor; cytostatic;
XX KW antiarteriosclerotic; antisense-therapy; hyperproliferative disorder;
XX KW atherosclerosis; tumour; c-raf kinase; antisense oligonucleotide; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN US2003119769-A1.
XX XX
XX PD 26-JUN-2003.
XX XX
XX PF 14-JUN-2002; 2002US-00173225.
XX XX
XX PR 31-MAY-1994; 94US-00250856.
XX PR 31-MAY-1995; 95WO-US007111.
XX PR 26-NOV-1996; 96US-00756806.
XX PR 07-JUL-1997; 97US-00888982.
XX PR 06-JUL-1998; 98WO-US013961.
XX PR 28-AUG-1998; 98US-00143214.
XX PR 18-FEB-2000; 2000US-00506073.
XX PR 25-JAN-2002; 2002US-00057550.
XX XX
XX PA (MONT/) MONIA B P.
XX XX
XX PI Monia BP;
XX XX

```

DR WPI; 2003-863446/80.  
 XX Preventing and/or treating conditions associated with raf expression,  
 PT such as hyperproliferative disorders, atherosclerosis and tumors, using  
 PT antisense oligonucleotide modulation of human raf gene expression.  
 XX Disclosure; SEQ ID NO 11; 41pp; English.  
 XX The invention describes a method of preventing or treating tumour  
 CC metastasis in an animal comprising administering to the animal an  
 CC oligonucleotide 8-50 nucleotides in length, which is targeted to mRNA  
 CC encoding human raf and capable of inhibiting raf expression. Also  
 CC disclosed are raf oligonucleotides, nucleic acids, proteins and  
 CC compositions used in the methods of the invention. The oligonucleotides  
 CC have cytostatic and antiarteriosclerotic properties, are useful as raf-  
 CC inhibitors and in antisense-therapy. The methods and compositions of the  
 CC present invention are useful for preventing and/or treating conditions  
 CC associated with raf expression, such as hyperproliferative disorders,  
 CC atherosclerosis and tumors. This sequence represents a human c-raf  
 CC kinase antisense oligonucleotide.  
 XX  
 XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1186 ATGGCCACAGCGCGTCCCT 1205  
 DB 20 ATGGCTCCAGGCTTCACCT 1  
 ||||| ||||| ||||| |||||  
 RESULT 1931  
 ADF08240/c  
 ID ADF08240 standard; DNA; 20 BP.  
 XX  
 AC ADF08240;  
 XX  
 XX 12-FEB-2004 (first entry)  
 DT  
 DE APOAV PCR primer #2.  
 XX  
 XX ss; PCR; primer; human; apolipoprotein A-V; APOAV; triglyceride;  
 KW lipid-related; diabetic disease; cardiovascular disease;  
 KW plasma triglyceride; diabete; obesity; metabolic disease; gene therapy;  
 KW single nucleotide polymorphism; apoA5.  
 XX  
 OS Homo sapiens..  
 XX  
 XX US2003150003-A1.  
 FN  
 XX 07-AUG-2003.  
 PD  
 XX 27-AUG-2002; 2002US-00229834.  
 PF  
 XX 07-SEP-2001; 2001US-0318219P.  
 PR  
 XX (RUBI/) RUBIN E.  
 PA (PENN/) PENNACCHIO L A.  
 PI Rubin E, Pennacchio LA;  
 XX  
 XX WPI; 2003-897618/82.  
 DR  
 XX New human apolipoprotein A-V (APOAV) polynucleotides and polypeptides,  
 PT useful for identifying or screening of drugs that treat lipid-related  
 PT diabetic diseases, for lowering plasma triglycerides, or in gene therapy.  
 XX  
 XX Disclosure; SEQ ID NO 23; 192pp; English.  
 PS  
 XX The invention relates to an isolated polynucleotide homologous to the  
 CC cDNA apolipoprotein A-V (APOAV) sequence. The human apolipoprotein A-V  
 CC (APOAV) gene, polynucleotides and polypeptides are useful for determining

CC predisposition towards elevated triglyceride levels, for identifying or  
 CC screening of drugs that treat lipid-related or diabetic diseases, or in  
 CC genetic analysis of cardiovascular diseases. The APOAV polypeptide is  
 CC useful for lowering plasma triglycerides or treating diabetes, obesity or  
 CC other metabolic diseases. The APOAV gene and vector are useful in gene  
 CC therapy. The single nucleotide polymorphisms are useful for determining  
 CC the genetic status of individuals or for studying individual risk  
 CC factors. The transgenic non-human animals are useful for further animal  
 CC studies of human or mouse apoA5. The present sequence represents an APOAV  
 CC PCR primer.  
 XX  
 XX Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 622 AAGCTGGACAACTGGCGA 641  
 DB 20 AACCTGGACGCTGGCGA 1  
 ||||| ||||| ||||| |||||  
 RESULT 1932  
 ADG40071  
 ID ADG40071 standard; DNA; 20 BP.  
 XX  
 AC ADG40071;  
 XX  
 XX 26-FEB-2004 (first entry)  
 DT  
 DE Viral cDNA PCR primer #5.  
 XX  
 XX ss; small interfering RNA; siRNA; pathogen; double-stranded RNA; dsRNA;  
 KW RNA interference; viral; bacterial; fungal; parasitic infection;  
 KW gene therapy; PCR; primer.  
 XX  
 OS Rous sarcoma virus.  
 XX  
 XX US2003203868-A1.  
 PN  
 XX 30-OCT-2003.  
 PD  
 XX 06-FEB-2003; 2003US-00361161.  
 PF  
 XX 06-FEB-2002; 2002US-0354684P.  
 PR  
 XX (BUSH/) BUSHMAN F D.  
 PA (HUWV/) HU W.  
 PI Bushman FD, Hu W;  
 XX  
 XX WPI; 2003-864723/80.  
 DR  
 XX Inhibiting the growth of a pathogen by contacting the pathogen with a  
 PT double-stranded RNA (dsRNA) that corresponds to a target gene essential  
 PT to growth of the pathogen and incubating the dsRNA and the pathogen for  
 PT RNA interference.  
 XX  
 XX Example 12; SEQ ID NO 26; 39pp; English.  
 PS  
 XX Inhibiting the growth of a pathogen comprises contacting the pathogen  
 CC with a double-stranded RNA (dsRNA) molecule that corresponds to a target  
 CC gene essential to growth of the pathogen and incubating the dsRNA  
 CC molecule and the pathogen under conditions suitable for RNA interference.  
 CC INDEPENDENT CLAIMS are also included for: a composition comprising dsRNA  
 CC that corresponds to a target gene of the HIV genome; a method of  
 CC identifying a gene sequence that is a target for RNA interference aimed  
 CC at inhibiting the growth of a pathogen; a method of treating a pathogenic  
 CC condition in a host organism; and a method of making a transgenic  
 CC organism capable of expressing a dsRNA that corresponds to a target gene  
 CC in a pathogen. Preferred Method: In the method of inhibiting the growth  
 CC of a pathogen, the pathogen is contained in a cell or contacted in vivo .  
 CC The pathogen is a retrovirus, which is HIV, or avian leukosis virus,

CC subtype J and Rous Sarcoma Virus. The pathogen causes a disease upon  
CC infecting an organism, which is a vertebrate, mammal, bird or chicken.  
CC The vertebrate comprises mammals, birds, amphibians, reptiles or fish.  
CC The mammal comprises dogs, cats, pigs, cows, sheep, goats, guinea pig,  
CC rabbits, rats, mice, chimpanzees or humans. The bird is chicken or  
CC turkey. The target gene is a cellular, viral or HIV gene, which is gag,  
CC pol or env. The contacting is by microinjection, transfection, viral  
CC infection, electroporation or gene gun particle bombardment. The dsRNA is  
CC encoded by a viral vector. It comprises a sequence that is a combination  
CC of sequences comprising 112 or 211 amino acids. Identifying a gene  
CC sequence that is a target for RNA interference aimed at inhibiting the  
CC growth of a pathogen comprises: selecting a candidate target gene  
CC sequence; contacting a host cell containing a pathogen with dsRNA that  
CC corresponds to the target gene sequence; and determining whether the  
CC dsRNA inhibits the growth of the pathogen. Treating a pathogenic  
CC condition in a host organism comprises: identifying the pathogen causing  
CC the condition; determining a suitable target gene sequence for RNA  
CC interference; and contacting the organism with a dsRNA sequence that  
CC corresponds to the target gene sequence under conditions for RNA  
CC interference. The target gene corresponds to a pathogen or host cellular  
CC gene. Making a transgenic organism capable of expressing a dsRNA that  
CC corresponds to a target gene in a pathogen comprises: identifying a  
CC target gene in the pathogen; preparing a nucleic acid sequence having a  
CC region that corresponds to a portion of the target gene; where the  
CC nucleic acid is able to form a double-stranded transcript once expressed  
CC in the organism; contacting a recipient organism with the nucleic acid;  
CC producing one or more offspring of the recipient organism; and testing  
CC the offspring for expression of the double-stranded transcript. The  
CC recipient organism is a pre-implantation mammalian embryo, which is  
CC transferred into a pseudo-pregnant female. The method further comprises  
CC allowing the embryo to develop into at least one viable transgenic mammal  
CC in which the expression of the target gene is inhibited by the presence  
CC of the double-stranded target gene transcript. The animal is contacted  
CC with primordial germ cells transfected with the nucleic acid. The  
CC contacting is effected by microinjection. The nucleic acid is expressed  
CC of an inducible promoter. Antibacterial; Fungicide; Antiparasitic;  
CC Virucide. No biological data given. RNA interference; Gene therapy. The  
CC method is useful in inhibiting the growth of a pathogen for treating  
CC viral, bacterial, fungal or parasitic infection (claimed).  
XX

Seq Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1360 CCCCGACTTGATAGCGGG 1379  
Db 1 CCCCGACTTGATAGGG 20

## RESULT 1933

ADG28985  
ID ADG28985 standard; DNA; 20 BP.

XX

AC ADG28985;

XX

26-FEB-2004 (first entry)

PCR primer SEQ ID 68 used to amplify human Mac2-BP cDNA.

XX

recombinant expression construct; cyclin-dependent kinase inhibitor; CDK;  
XX virucide; cytostatic; neuroprotective; nontropic; antiarteriosclerotic;  
XX antiarthritic; nephrotropic; viral infection; cancer; renal;  
XX age-related disease; Alzheimer's; atherosclerosis; arthritis;  
XX gene therapy; human; ss; PCR; primer; Mac2-BP.

OS Homo sapiens.

XX

WO2003073062-A2.

XX

04-SEP-2003.

XX

PF 29-AUG-2002; 2002WO-US027584.

XX

PR 29-AUG-2001; 2001US-0315791P.

XX

PA (UNII ) UNIV ILLINOIS FOUND.

XX

PI Roninson IB, Poole J;

XX

DR WPI; 2003-731624/69.

XX

PT New recombinant expression construct for identifying and modulating

XX expression of genes regulated by cyclin-dependent kinase inhibitors, such

PT as genes involved in viral infection, cancer, renal diseases or age-

XX related diseases.

PS Example 11; SEQ ID NO 68; 143pp; English.

XX

CC The invention relates to a novel recombinant expression construct

CC encoding a reporter gene operably linked to a promoter from a mammalian

CC viral or cellular gene induced by a cyclin-dependent kinase (CDK)

CC inhibitor. The construct of the invention demonstrates virucide,

CC cytostatic, neuroprotective, nontropic, antiarteriosclerotic,

CC antiarthritic and nephrotropic activities and may be useful in

CC identifying compounds that inhibit the induction of genes involved in

CC viral infection, cancer, renal diseases or age-related diseases including

CC Alzheimer's disease, atherosclerosis or arthritis, such genes being

CC induced by cyclin-dependent kinase inhibitors. Furthermore, The construct

CC may have gene therapy applications. The current sequence is that of the

CC PCR primer which was used in the exemplification of the invention.

XX

Seq Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 48 ACCAGCAGTGAGCTGCTGA 67

Db 1 ACCATGAGTGTGATGCTGA 20

RESULT 1934

ADP88118

ID ADP88118 standard; DNA; 20 BP.

XX

AC ADP88118;

XX

26-FEB-2004 (first entry)

Single nucleotide polymorphism detection primer, SEQ ID No 1701.

XX

human; single nucleotide polymorphism; microarray; side effect; ss;

XX primer; PCR.

OS Synthetic.

XX

OS Homo sapiens.

XX

JP2003235571-A.

XX

26-AUG-2003.

XX

12-FEB-2002; 2002JP-00034717.

XX

12-FEB-2002; 2002JP-00034717.

XX

(KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX

WPI; 2003-820454/77.

XX

Novel polynucleotide useful for detecting single nucleotide polymorphisms

XX in human gene.

XX

Claim 2; SEQ ID NO 1701; 704pp; Japanese.

PS

Tue Nov 2 13:39:09 2004

XX The invention relates to a novel polynucleotide isolated and purified  
 CC from a human gene having any one of 935 fully defined sequences as given  
 CC in specification, or a sequence having a base substitution. The invention  
 CC further relates to: an oligonucleotide containing single nucleotide  
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA  
 CC fragments from any one of 1220 fully defined sequences as given in  
 CC a microarray equipped with the SNP containing oligo. The isolated human  
 CC gene of the invention is useful for detecting the single nucleotide  
 CC polymorphisms in human gene. The isolated human gene is also useful for  
 CC diagnosis of disease and determination of side effect to a medical agent.  
 CC The isolated human gene is also effective in detecting single nucleotide  
 CC polymorphisms in a human gene. This polynucleotide sequence represents  
 CC one of the PCR primers used in the single nucleotide polymorphism  
 CC detection method of the invention.

XX Sequence 20 BP; 4 A; 1 C; 10 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 229 AGTGGTGGTGGCGGCGAG 248  
 ||||| ||||| ||||| |||||  
 Db 1 AGTGGTGGTGGCGGCGAG 20

RESULT 1935  
 ADF88279/C  
 ID ADF88279 standard; DNA; 20 BP.  
 XX AC ADF88279;  
 XX DT 26-FEB-2004 (first entry)  
 XX DE Single nucleotide polymorphism detection primer, SEQ ID NO 1862.  
 XX human; single nucleotide polymorphism; microarray; side effect; ss;  
 KW primer; PCR.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX JP2003235571-A.  
 XX 26-AUG-2003.  
 XX 12-FEB-2002; 2002JP-00034717.  
 XX 12-FEB-2002; 2002JP-00034717.  
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
 XX WPI; 2003-820454/77.  
 XX Novel polynucleotide useful for detecting single nucleotide polymorphisms  
 PT in human gene.  
 XX Claim 2; SEQ ID NO 1862; 704pp; Japanese.

XX The invention relates to a novel polynucleotide isolated and purified  
 CC from a human gene having any one of 935 fully defined sequences as given  
 CC in specification, or a sequence having a base substitution. The invention  
 CC further relates to: an oligonucleotide containing single nucleotide  
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA  
 CC fragments from any one of 1220 fully defined sequences as given in  
 CC a microarray equipped with the SNP containing oligo. The isolated human  
 CC gene of the invention is useful for detecting the single nucleotide  
 CC polymorphisms in human gene. The isolated human gene is also useful for  
 CC diagnosis of disease and determination of side effect to a medical agent.  
 CC The isolated human gene is also effective in detecting single nucleotide  
 CC polymorphisms in a human gene. This polynucleotide sequence represents  
 CC one of the PCR primers used in the single nucleotide polymorphism  
 CC detection method of the invention.

XX Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 245 GCAGTGACCTCGGAGAGGCC 264  
 ||||| ||||| ||||| |||||  
 Db 20 GCTCTGACACTGGAGATGCC 1

RESULT 1936  
 ADF91007/C  
 ID ADF91007 standard; DNA; 20 BP.  
 XX AC ADF91007;  
 XX DT 26-FEB-2004 (first entry)  
 XX DE Microorganism detection PCR primer, SEQ ID NO 90.  
 XX Detection; microorganism; PCR; primer; bacterium; fungus; protozoan;  
 KW virus; diarrhoea; food poisoning; ss.  
 XX Staphylococcus aureus.  
 XX JP2003164282-A.  
 XX 10-JUN-2003.  
 XX 29-NOV-2001; 2001JP-00365153.  
 XX 29-NOV-2001; 2001JP-00365153.  
 XX (RAKA-) RAKAN KK.  
 XX (GIFU-) GIFU DAIGAKUCHO.  
 XX WPI; 2003-793230/75.  
 XX Rapid, sensitive detection of specific or unspecified microbes causing  
 PT diarrhea and food poisoning, using primers which target universal and  
 PT specific genes, and amplifying by PCR under heat cycle conditions  
 PT suitable for many detections.  
 XX Disclosure; SEQ ID NO 90; 69pp; Japanese.

XX The present invention relates to a method for detecting microorganisms  
 CC using primers (ADF90918-ADF91145). The method is used for detecting  
 CC microorganisms (bacteria, fungi, protozoa, viruses) which cause diarrhoea  
 CC symptoms, and pathogenic microbe of food poisoning. The method can be  
 CC used to detect unspecified microbes, or specific pathogens, or for the  
 CC simultaneous detection of many kinds of microorganism.  
 XX Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 755 AAGTGTCCCTGCTCAAGGAC 774  
 ||||| ||||| ||||| |||||  
 Db 20 AAGTGTAAACACTCAAGAAC 1

RESULT 1937  
 ADH94130/C  
 ID ADH94130 standard; DNA; 20 BP.  
 XX AC ADH94130;  
 XX ADH94130;

XX 22-APR-2004 (first entry)  
 XX Human gene PCR primer #975.  
 DE  
 DE  
 XX human; gene sequence; single nucleotide polymorphism; SNP;  
 XX disease diagnosis; ss; PCR; primer.  
 XX Homo sapiens.  
 OS  
 XX JP2003174883-A.  
 PN  
 XX 24-JUN-2003.  
 PD  
 XX 11-DEC-2001; 2001JP-00377637.  
 PF  
 XX 11-DEC-2001; 2001JP-00377637.  
 PR  
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
 PA  
 XX WPI; 2003-819215/77.  
 DR  
 XX Polynucleotide for detecting single nucleotide polymorphisms existing in  
 PT human gene, contains isolated human gene having specified sequence.  
 PT human gene, contains isolated human gene having specified sequence.  
 XX  
 PS Claim 2; SEQ ID NO 1967; 529pp; Japanese.  
 XX  
 CC The invention comprises isolated human gene sequences and PCR primer  
 CC sequences which can be used to detect single nucleotide polymorphisms  
 CC (SNPs). The DNA sequences of the invention are useful for detecting SNPs  
 CC existing in human genes and for the diagnosis of human disease. The  
 CC present DNA sequence represents a human gene PCR primer of the invention.  
 XX  
 XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1282 CCAGGCATCCTGTCACAGA 1301  
 Db 20 CCAGGCAGCCTTCCATAGA 1  
 RESULT 1938  
 ADI00246  
 ID ADI00246 standard; DNA; 20 BP.  
 XX  
 AC ADI00246;  
 AC ADI00246;  
 XX  
 XX 22-APR-2004 (first entry)  
 XX  
 DE PCR primer SEQ ID 26 used to amplify human PKD-1 exon 46A DNA.  
 XX  
 XX mutation analysis; PKD; polycystic kidney disease; human; PKD-1; ss; PCR;  
 KW primer.  
 KW  
 XX Homo sapiens.  
 OS  
 XX US2003152936-A1.  
 PN  
 XX 14-AUG-2003.  
 PD  
 XX 26-FEB-2002; 2002US-00083246.  
 PF  
 XX 12-OCT-2001; 2001US-0328739P.  
 PR  
 XX (ATHE-) ATHENA DIAGNOSTICS INC.  
 XX  
 XX Jones JG, Hennigan AN, Curran JA, Allen SK, Robichaud NJ, Wang J;  
 PI Flynn KE, Garces JA, Palatucci CM;  
 PI  
 XX WPI; 2003-897708/82.  
 DR

XX Analyzing mutations of a target nucleic acid by detecting heteroduplexes  
 PT from generated duplexes, useful for diagnosing patients affected with  
 PT polycystic kidney disease.  
 XX  
 XX Claim 3; SEQ ID NO 26; 126pp; English.  
 PS  
 XX The invention relates to a novel method of mutation analysis of a target  
 CC nucleic acid which comprises incubating a sample having the target  
 CC nucleic acid in a reaction mixture, in the presence of at least one first  
 CC and second nucleic acid, where incubation produces amplified products,  
 CC generating duplexes in the amplified products and detecting the presence  
 CC or absence of a heteroduplex from the duplexes, where its presence  
 CC indicates a potential mutation in the target nucleic acid and its absence  
 CC indicates the absence of mutation in the target nucleic acid. The method  
 CC and compositions of the invention may be useful for analysing mutation  
 CC and diagnosing patients affected with PKD (polycystic kidney disease).  
 CC The current sequence is that of a PCR primer of the invention which was  
 CC used to amplify human polycystic kidney disease PKD-1 DNA.  
 XX  
 XX Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 623 AGCTGGACAAACTGGCGAG 642  
 Db 1 AGTCGGTCAAACTGGGTGAG 20  
 RESULT 1939  
 AAD53075  
 ID AAD53075 standard; DNA; 20 BP.  
 XX  
 AC AAD53075;  
 AC AAD53075;  
 XX  
 DT 14-MAY-2003 (first entry)  
 XX  
 DE BAGE marker gene specific sense RT-PCR primer.  
 XX  
 KW Beta 1, 4-N-acetylgalactosaminyltransferase; GD2 synthase; GM2; RT-PCR;  
 KW reverse transcriptase PCR; medullablastoma; astrocytoma; retinoblastoma;  
 KW cancer; neuroblastoma; melanoma; lymphoma; carcinoma; sarcoma; tumour;  
 KW primer; BAGE; ss.  
 XX  
 OS Unidentified.  
 OS  
 XX WO200292767-A2.  
 PN  
 XX 21-NOV-2002.  
 PD  
 XX 19-APR-2002; 2002WO-US015037.  
 PF  
 XX 11-MAY-2001; 2001US-0290527P.  
 PR  
 XX (SLOK ) SLOAN KETTERING INST CANCER RES.  
 XX  
 XX Cheung IV, Cheung NV;  
 PI  
 XX WPI; 2003-129279/12.  
 DR  
 XX Measuring GD2 synthase mRNA, useful for detecting or diagnosing cancer,  
 PT e.g. neuroblastoma, small cell lung cancer, melanoma, by performing real-  
 PT time quantitative RT-PCR on the sample using appropriate primers of GD2  
 PT synthase.  
 XX  
 XX Claim 61; Page 138; 165pp; English.  
 PS  
 XX The invention relates to a method of measuring beta 1,4-N-  
 CC acetylglactosaminyltransferase (GD2/GM3 synthase) mRNA. The method  
 CC involves obtaining an mRNA sample, performing real-time quantitative  
 CC reverse transcriptase-polymerase chain reaction (RT-PCR) on the sample

CC using appropriate primers of GD2 synthase, and determining the amount of  
 CC GD2 mRNA. The methods and kits are useful for detecting and/or diagnosing  
 CC various forms of cancer such as neuroblastoma, melanoma, B cell lymphoma,  
 CC osteosarcoma, soft tissue sarcoma, medullablastoma, high-grade  
 CC astrocytoma, retinoblastoma, Wilms' tumour, Ewing's sarcoma, bladder  
 CC carcinoma, lung cancer, breast cancer, pancreatic cancer, oesophageal  
 CC cancer, gastrointestinal cancer, sarcoma, head and neck tumours or  
 CC melanoma. The present sequence is BAGE marker gene specific RT-PCR  
 CC primer, used to illustrate the method of the invention

XX Sequence 20 BP; 6 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 232 GGTGGTGGTGGCGGACAGTA 251

Db 1 GATGGTGGTGGCAACAGAGA 20

RESULT 1940

ABX78206

ID ABX78206 standard; DNA; 20 BP.

XX AC ABX78206;

XX DT 17-APR-2003 (first entry)

XX Human bifunctional apoptosis regulator antisense oligo ISIS NO 143737.

XX Human; bifunctional apoptosis regulator; antisense; phosphorothioate;  
 KW cytosstatic; antiinflammatory; inhibitor; infection; inflammation; tumour;  
 KW ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "phosphorothioate backbone, nucleotides 1-5 and 16  
 FT -20 are 2'-methoxyethoxy (MOE) nucleotides, nucleotides 7  
 FT -14 are 2'-deoxy- nucleotides, all C nucleotides are 5-  
 FT methyl cytosines"

XX US6468796-B1.

XX PD 22-OCT-2002.

XX PF 27-APR-2001; 2001US-00844525.

XX PR 27-APR-2001; 2001US-00844525.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Watt AT;

XX WIPI; 2003-196749/19.

XX New antisense compounds targeted to nucleic acids encoding human  
 PT bifunctional apoptosis regulator, for modulating expression of the  
 PT regulator and treating diseases associated with expression of the  
 PT regulator in humans.

XX Claim 3; Col 45-46; 42pp; English.

XX This invention describes a novel compound, 17-50 nucleobases in length  
 CC which specifically hybridises with a nucleic acid encoding human  
 CC bifunctional apoptosis regulator (BAR) and inhibits the expression of  
 CC bifunctional apoptosis regulator (BAR) in the expression of  
 CC human BAR. The products of the invention have cytostatic and  
 CC antiinflammatory activity and can be used to inhibit human BAR expression  
 CC during antisense therapy, useful for inhibiting the expression of human

CC BAR in cells or tissues and for treating diseases associated with  
 CC expression of BAR in an animal, particularly a human suspected of having  
 CC or being prone to a disease or condition associated with expression of  
 CC human BAR. In addition the antisense oligonucleotides are useful for  
 CC diagnostic, therapeutic and as research reagent, e.g. prophylactically  
 CC to prevent or delay infection, inflammation or tumor formation. The  
 CC oligonucleotides described in the invention have 2'-methoxyethyl (2'-MOE)  
 CC wings and a deoxy gap. This sequence represents a human BAR antisense  
 CC oligonucleotide described in the disclosure of the invention

XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 195 CAATGGTCCCTGAGCAGA 214

Db 1 CAATGGCATCCCTGAGGAGA 20

RESULT 1941

ABZ90450

ID ABZ90450 standard; DNA; 20 BP.

XX AC ABZ90450;

XX DT 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO20028308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPFIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WIPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiqunone.

XX Disclosure; SEQ ID NO 5692; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiqunone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also



CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 20 BP; 4 A; 9 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1034 ACTTGGCCCTGGCCGAGCC 1053  
 ||| ||||| ||||| |||||  
 Db 1 ACTGAGCCAGCCCGAGCC 20

RESULT 1942  
 ABZ92603/c  
 ID ABZ92603 standard; DNA; 20 BP.

AC ABZ92603;

DT 17-OCT-2003 (first entry)  
 DE Human oligonucleotide sequence.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; lung; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

PS Disclosure; SEQ ID NO 7845; 872pp; English.

CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 16 GGATGGACAGGAATGCACAG 35  
 ||||| ||||| ||||| |||||  
 Db 20 GGATGGCCGGGACTGCACAG 1

RESULT 1943  
 ABZ88825  
 ID ABZ88825 standard; DNA; 20 BP.

AC ABZ88825;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; lung; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

PS Disclosure; SEQ ID NO 4067; 872pp; English.

CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

Tue Nov 2 13:39:09 2004

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 6 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1485 CAACCTCTCTGACACTACTT 1504

DB 1 CAACCTCTCTGATTTTANTT 20

RESULT 1944

ABZ87133/C  
 ID ABZ87133 standard; DNA; 20 BP.

XX AC ABZ87133;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (BFIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX Claim 15; SEQ ID NO 2375; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1285 GGCATCTCTGTCCACGAGGA 1304

DB 20 GGCATCCCGACCGCATGA 1

RESULT 1945

ABZ92417

ID ABZ92417 standard; DNA; 20 BP.

XX AC ABZ92417;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (BFIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX Disclosure; SEQ ID NO 7659; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1052 CCAAGTCAATCCCAACAAAG 1071  
Db 1 CCAAGTCACTCCAGCAGAG 20

RESULT 1946

ABZ88076  
ID ABZ88076 standard; DNA; 20 BP.

XX  
AC ABZ88076;

XX  
DT 17-OCT-2003 (first entry)

XX  
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiaschmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX  
PD 31-OCT-2002.

XX  
PF 23-APR-2002; 2002WO-US013135.

XX  
PR 24-APR-2001; 2001US-0286137P.

XX  
PA (EPIG-) EPIGENESIS PHARM INC.

XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 3318; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiaschmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 457 GAGGACATCAACAAGCGCCT 476  
Db 1 GAGGAGCTCAACAAGCTGCT 20

RESULT 1947

ABZ88262/C

XX  
ID ABZ88262 standard; DNA; 20 BP.

XX  
AC ABZ88262;

XX  
DT 17-OCT-2003 (first entry)

XX  
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiaschmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX  
PD 31-OCT-2002.

XX  
PF 23-APR-2002; 2002WO-US013135.

XX  
PR 24-APR-2001; 2001US-0286137P.

XX  
PA (EPIG-) EPIGENESIS PHARM INC.

XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 3504; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiaschmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX  
 SQ Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1020 GCTCAAGTGGCTGACTTTG 1039

DB 20 GCTAAAGTGGCTGTCTTG 1

RESULT 1948

ABZ84865

ID ABZ84865 standard; DNA; 20 BP.

XX

AC ABZ84865;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX

PN WO200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX

XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX Claim 15; SEQ ID NO 107; 872pp; English.

PS

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 CC

XX Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 299 CACGGGGCCCACTCAGCTCT 318

DB 1 CACTGTCCCACTCAGCTCT 20

RESULT 1949

ABZ85601/c

ID ABZ85601 standard; DNA; 20 BP.

XX

AC ABZ85601;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX

PN WO200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX

XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX Claim 15; SEQ ID NO 843; 872pp; English.

PS

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 763 CTGCTCAAGGACCTCAAACA 782  
 |||||  
 Db 20 CTGCTCAAGGACCAAGACCA 1  
 RESULT 1950  
 ABZ86435/c  
 ID ABZ86435 standard; DNA; 20 BP.  
 XX  
 AC ABZ86435;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Human oligonucleotide sequence.  
 XX  
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; lung allergy;  
 KW lung inflammation; bronchoconstriction; lung allergy;  
 XX lung inflammation; respiratory disease; ds.  
 OS Homo sapiens.  
 XX  
 XX WO200285308-A2.  
 XX  
 XX 31-OCT-2002.  
 XX  
 XX 23-APR-2002; 2002WO-US013135.  
 XX  
 XX 24-APR-2001; 2001US-0286137P.  
 XX  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-229219/22.  
 XX  
 PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 XX  
 PS Claim 15; SEQ ID NO 1677; 872pp; English.  
 XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1481 TCCACAACCTTCTGACACT 1500  
 |||||  
 Db 20 TCCAGAAAGCTCTTAACACT 1  
 RESULT 1951  
 ABZ92850/c  
 ID ABZ92850 standard; DNA; 20 BP.  
 XX  
 AC ABZ92850;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Human oligonucleotide sequence.  
 XX  
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.  
 XX Homo sapiens.  
 OS  
 XX WO200285308-A2.  
 XX  
 XX 31-OCT-2002.  
 XX  
 XX 23-APR-2002; 2002WO-US013135.  
 XX  
 XX 24-APR-2001; 2001US-0286137P.  
 XX  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-229219/22.  
 XX  
 PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 XX  
 PS Disclosure; SEQ ID NO 8092; 872pp; English.  
 XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03; Indels 0; Gaps 0;  
Matches 16; Conservative 0; Mismatches 4;  
QY 657 CGCTACAAAGGCAAAAGCA 676  
Db 20 CTTCTAAAGGTCAAAGCA 1  
RESULT 1952  
ABZ75967/c  
ID ABZ75967 standard; DNA; 20 BP.  
XX  
AC ABZ75967;  
XX  
XX 29-MAY-2003 (first entry)  
XX  
XX ICAM-1 gene targeting 2'-deoxyoligonucleotide ISIS 1939.  
DE  
XX ICAM-1; desulphurization; antioxidant; intercellular adhesion molecule-1;  
KW ss.  
KW  
XX Synthetic.  
OS Homo sapiens.  
OS  
XX WO2003005822-A1.  
PN  
XX 23-JAN-2003.  
PD  
XX 11-JUL-2002; 2002WO-US022038.  
PF  
XX 11-JUL-2001; 2001US-00902953.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Krotz AH, Mehta R;  
PI  
XX WPI; 2003-229426/22.  
DR  
XX Preventing desulfurization of oligonucleotide comprising phosphorothioate  
PT linkages in bi-phasic/multi-phasic formulation, by adding to formulation  
PT an antioxidant that partitions into aqueous phase of the formulation.  
XX  
PS Disclosure; Page 12; 51pp; English.  
XX  
XX The invention relates to preventing desulphurization of an  
CC oligonucleotide or its bioequivalent comprising one or more  
CC phosphorothioate linkages in a bi-phasic or multi-phasic formulation. The  
CC method involves including in the formulation an antioxidant which  
CC partitions into the aqueous phase of the formulation. The method is  
CC useful for increasing the stability of oligonucleotide comprising  
CC phosphorothioate linkages. The present sequence represents a 2'-  
CC deoxyoligonucleotide having a phosphorothioate backbone and is targeted  
CC to the 3' UTR (untranslated region) of ICAM-1 (intercellular adhesion  
CC molecule-1)  
XX  
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03; Indels 0; Gaps 0;  
Matches 16; Conservative 0; Mismatches 4;  
QY 657 CGCTACAAAGGCAAAAGCA 676  
Db 20 CTTCTAAAGGTCAAAGCA 1  
RESULT 1953  
ABZ82717/c  
ID ABZ82717 standard; DNA; 20 BP.  
XX  
AC ABZ82717;  
XX  
XX 14-MAY-2003 (first entry)  
XX  
XX Human HSL chimeric phosphorothioate oligonucleotide SQ ID NO:106.  
DE  
XX Hormone-sensitive lipase; antisense oligonucleotide; inhibitor; obesity;  
KW phosphorothioate; antidiabetic; anorectic; cytostatic; antisense therapy;  
KW abnormal metabolic condition; hyperlipidaemia; type 2 diabetes; cancer;  
KW hyperproliferative disorder; human; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
OS  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate linkages"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"  
XX  
XX WO2003010139-A2.  
PN  
XX 06-FEB-2003.  
PD  
XX 15-JUL-2002; 2002WO-US022672.  
PF  
XX 26-JUL-2001; 2001US-00915814.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Butler MM, Watt AT, Freier SM, Wyatt JR;  
PI  
XX WPI; 2003-239411/23.  
DR  
XX New antisense oligonucleotides targeted against nucleic acids encoding  
PT hormone-sensitive lipase, useful for treating abnormal metabolic  
PT condition, e.g. hyperlipidemia and obesity, or a hyperproliferative  
PT disorder, e.g. cancer.  
XX  
XX Example 15; Page 89; 167pp; English.  
PS  
XX The present invention describes a compound (I) 8-50 nucleobases in length  
CC targeted to a nucleic acid molecule encoding a hormone-sensitive lipase  
CC (HSL) or a splice variant of HSL. The compound specifically hybridises  
CC with and inhibits the expression of HSL or a splice variant of HSL, or  
CC specifically hybridises with at least an 8-nucleobase portion of an  
CC active site on a nucleic acid molecule encoding HSL. (I) have anorectic,  
CC antidiabetic and cytostatic activities, and can be used in antisense  
CC therapy. (I) is useful for treating an animal, particularly human,  
CC suspected of having an abnormal metabolic condition such as obesity,  
CC hyperlipidaemia, type 2 diabetes, a hyperproliferative disorder such as  
CC cancer (e.g. pituitary, colorectal, breast, testicular, pulmonary or  
CC epithelial cancer). (I) is also useful in modulating blood glucose  
CC levels, particularly plasma or serum glucose levels, in a diabetic  
CC animal. The present sequence represents a human hormone-sensitive lipase

QY 226 CAGAGTGGTGGTGGTGGCGG 245  
||||| ||| ||||| |||  
Db 20 CAGAGGGGAAGTGGTGGGG 1  
RESULT 1953  
ABZ82717/c  
ID ABZ82717 standard; DNA; 20 BP.  
XX  
AC ABZ82717;  
XX  
XX 14-MAY-2003 (first entry)  
XX  
XX Human HSL chimeric phosphorothioate oligonucleotide SQ ID NO:106.  
DE  
XX Hormone-sensitive lipase; antisense oligonucleotide; inhibitor; obesity;  
KW phosphorothioate; antidiabetic; anorectic; cytostatic; antisense therapy;  
KW abnormal metabolic condition; hyperlipidaemia; type 2 diabetes; cancer;  
KW hyperproliferative disorder; human; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
OS  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate linkages"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"  
XX  
XX WO2003010139-A2.  
PN  
XX 06-FEB-2003.  
PD  
XX 15-JUL-2002; 2002WO-US022672.  
PF  
XX 26-JUL-2001; 2001US-00915814.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Butler MM, Watt AT, Freier SM, Wyatt JR;  
PI  
XX WPI; 2003-239411/23.  
DR  
XX New antisense oligonucleotides targeted against nucleic acids encoding  
PT hormone-sensitive lipase, useful for treating abnormal metabolic  
PT condition, e.g. hyperlipidemia and obesity, or a hyperproliferative  
PT disorder, e.g. cancer.  
XX  
XX Example 15; Page 89; 167pp; English.  
PS  
XX The present invention describes a compound (I) 8-50 nucleobases in length  
CC targeted to a nucleic acid molecule encoding a hormone-sensitive lipase  
CC (HSL) or a splice variant of HSL. The compound specifically hybridises  
CC with and inhibits the expression of HSL or a splice variant of HSL, or  
CC specifically hybridises with at least an 8-nucleobase portion of an  
CC active site on a nucleic acid molecule encoding HSL. (I) have anorectic,  
CC antidiabetic and cytostatic activities, and can be used in antisense  
CC therapy. (I) is useful for treating an animal, particularly human,  
CC suspected of having an abnormal metabolic condition such as obesity,  
CC hyperlipidaemia, type 2 diabetes, a hyperproliferative disorder such as  
CC cancer (e.g. pituitary, colorectal, breast, testicular, pulmonary or  
CC epithelial cancer). (I) is also useful in modulating blood glucose  
CC levels, particularly plasma or serum glucose levels, in a diabetic  
CC animal. The present sequence represents a human hormone-sensitive lipase

CC chimeric phosphorothioate antisense oligonucleotide, which is used in an  
CC example from the present invention

XX  
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1003 ATCAACGAGGGGAGAGCT 1022

DB 20 ATCACCAGATGGAAGTCT 1

RESULT 1954

ACC49170/c  
ID ACC49170 standard; DNA; 20 BP.

XX  
AC ACC49170;

XX  
DT 19-JUN-2003 (first entry)

XX  
DE ICAM-1 inhibitory antisense oligonucleotide SEQ ID NO:2.

XX  
KW Inhibition; phosphorothioate; delayed release oral formulation;  
KW enhanced gastrointestinal absorption; ulcerative colitis;  
KW rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;  
KW abnormal cellular proliferation; ss.

XX  
OS Synthetic.

XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20

XX  
FT /\*tag= a

XX  
FT /mod\_base= OTHER

XX  
FT /note= "phosphorothioate linkages"

XX  
FN WO2003017940-A2.

XX  
PD 06-MAR-2003.

XX  
PF 22-AUG-2002; 2002WO-US026924.

XX  
PR 22-AUG-2001; 2001US-00944493.

XX  
PA (ISIS-) ISIS PHARM INC.

XX  
PI Weinbach SP, Tillman LG, Geary RS, Hardee GE;

XX  
DR WPI; 2003-354422/33.

XX  
PT Pulsed release oral formulation providing enhanced gastrointestinal  
PT absorption, comprises first particles containing drug and penetration  
PT enhancer and second particles containing delayed release penetration  
PT enhancer.

XX  
PS Disclosure; Page 28; 59pp; English.

XX  
CC The present invention describes a delayed release oral formulation (A),  
CC giving enhanced gastrointestinal (GI) absorption of a drug (I). (A)  
CC comprises a first set of particles containing (I) and a penetration  
CC enhancer (II) and a second set of particles containing (II) in a delayed  
CC release coating or matrix (III). (A) is used for enhancing the absorption  
CC of (I) in mammals, especially humans. Typical disorders to be treated  
CC include ulcerative colitis, rheumatoid arthritis, Crohn's disease,  
CC inflammatory bowel disease and abnormal cellular proliferation. When the  
CC particles release (I) and (II) at a first location in the GI tract  
CC (generally the intestines), (II) is rapidly absorbed (during a first  
CC release pulse) and is often present in insufficient amount to promote  
CC absorption of the entire dose of (I). This problem is solved by providing  
CC further (II) in delayed release form in the particles, so that absorption  
CC of (I) is completed in a second pulse. The present sequence represents an  
CC exemplary oligonucleotide from the present invention which inhibits ICAM-

CC 1

XX  
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGGCGG 245

DB 20 GAGAGGGGAAGTGTGTGGGG 1

RESULT 1955

ACC62163/c  
ID ACC62163 standard; DNA; 20 BP.

XX  
AC ACC62163;

XX  
DT 20-JUN-2003 (first entry)

XX  
DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 52.

XX  
KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
KW glucose; antisense oligonucleotide; ss.

XX  
OS Synthetic.

XX  
PN WO2003011887-A2.

XX  
PD 13-FEB-2003.

XX  
PF 30-JUL-2002; 2002WO-US024247.

XX  
PR 01-AUG-2001; 2001US-00920033.

XX  
PR 30-APR-2002; 2002US-00135985.

XX  
PR 15-MAY-2002; 2002US-00147196.

XX  
PA (ISIS-) ISIS PHARM INC.

XX  
PI Crooke RM, Graham MJ;

XX  
DR WPI; 2003-269105/26.

XX  
PT New antisense oligonucleotides for modulating apolipoprotein B,  
PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
PT triglyceride levels.

XX  
PS Example 15; Page 96; 160pp; English.

XX  
CC The invention relates to a novel compound that is 8-50 nucleotides in  
CC length that is targeted to a nucleic acid molecule encoding  
CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
CC the expression of a nucleic acid molecule encoding ApoB; or which  
CC specifically hybridises with at least an 8-nucleotide portion of an  
CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
CC anorectic, and cardiovascular activity. The compound may have a use in  
CC gene therapy. The antisense oligonucleotide is useful for treating an  
CC animal having a disease or conditions associated with ApoB, e.g. a  
CC condition involving abnormal lipid metabolism, a condition involving  
CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
CC (specifically type 2 diabetes), obesity, atherosclerosis or  
CC cardiovascular disease). The new compound or the antisense  
CC oligonucleotide is also useful for modulating glucose levels  
CC (particularly plasma or serum glucose levels) in a human or diabetic  
CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,



CC particularly in a human. The antisense compound is also useful for  
CC preventing or delaying the onset of a disease or condition associated  
CC with ApOB, or the onset of an increase in glucose levels in the animal or  
CC human. The present sequence is used in the exemplification of the  
CC invention

XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1565 TGCTGACTCAGCAGGCCA 1584  
Db 20 TACCTGTCTGTGGTGGCA 1

RESULT 1956  
ABX13023  
ID ABX13023 standard; DNA; 20 BP.  
XX  
AC ABX13023;  
XX  
DT 10-MAY-2003 (first entry)  
XX  
DE Oxidative stress detection PCR primer #64.  
XX  
KW Oxidative stress detection; PCR; primer; ss; risk factor.  
XX  
OS Homo sapiens.  
XX  
PN WO2003016527-A2.  
XX  
PD 27-FEB-2003.  
XX  
PF 13-AUG-2002; 2002WO-EP009079.  
XX  
PR 14-AUG-2001; 2001BE-00000545.  
XX  
PA (PROB-) PROBIOX SA.  
XX  
PI Pincemail J, Piette J, Marechal D;  
XX  
XX WPI; 2003-269334/26.  
XX

XX Determining oxidative stress markers in a group of individuals by  
PT comparing the amount of each of the oxidative stress markers obtained  
PT from each of the group of individuals with that of the group of healthy  
PT individuals.

XX Disclosure; Page 36; 67pp; English.  
PS  
XX The invention relates to a method for determining oxidative stress  
CC markers in a group of individuals. The method comprises determining the  
CC risk factor for oxidative stress in the group, measuring the amount of at  
CC least 10 different oxidative stress markers in a sample obtained from  
CC each of the group of individuals, and comparing the amount of each of the  
CC oxidative stress markers with the amount of each of the oxidative stress  
CC markers measured in a group of healthy individuals to determine whether  
CC the oxidative stress markers are increased or decreased in the group of  
CC individuals carrying a risk factor for oxidative stress relative to  
CC healthy individuals. This sequence represents a PCR primer used to detect  
CC oxidative stress  
XX

XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 621 TAAGCTGGACAAACTGGGCG 640  
Db 1 TGACCTTGACAAAGTGGTCG 20

RESULT 1957  
ABX33984/C  
ID ABX33984 standard; DNA; 20 BP.  
XX  
AC ABX33984;  
XX  
DT 10-FEB-2003 (first entry)  
XX  
DE Human interleukin 12 p40 subunit antisense oligonucleotide ISIS #139157.  
XX  
KW Human; ss; antisense; interleukin 12 p40 subunit; antibacterial;  
KW antiinflammatory; cytostatic; infection; inflammation; tumour.  
XX  
OS Homo sapiens.

XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "All cytosines are 5-methylcytidines and the  
FT nucleotides are linked via a phosphorothioate backbone"  
FT modified\_base 1..5  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

US6448081-B1.

10-SEP-2002.

07-MAY-2001; 2001US-00851062.

07-MAY-2001; 2001US-00851062.

(ISIS-) ISIS PHARM INC.

Baker BF, Freier SM;

WPI; 2003-074100/07.

XX New antisense chimeric oligonucleotide, useful for modulating the  
PT expression of human interleukin 12 p40 subunit, in treating or preventing  
PT disease states in humans and animals, and as research reagents and  
PT diagnostics.

XX Example 15; Col 45; 42pp; English.

XX The invention relates to an antisense compound 20-50 nucleobases in  
CC length targeted to a start codon region, coding region, a stop codon  
CC region or a 3'-untranslated region of a nucleic acid molecule encoding  
CC human interleukin 12 p40 subunit. The compound specifically hybridises  
CC with one of the regions and inhibits the expression of human interleukin  
CC 12 p40 subunit. The new compound is useful for inhibiting the expression  
CC of human interleukin 12 p40 subunit in cells or tissues and comprises  
CC contacting the cells or tissues in vitro with the compound, so that  
CC expression of the human interleukin 12 p40 subunit is inhibited. The  
CC antisense compound may also be used as research reagents and diagnostics,  
CC and as treatment or prevention of disease states, e.g. to prevent or  
CC delay infection, inflammation or tumour formation, in animals and humans.  
CC The present sequence is an antisense oligonucleotide of the invention

XX Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



QY 1717 CTGAGCCATGTTCACTGCG 1736  
 || ||||| ||||| |||||  
 Db 20 CTCAGCCACGGTCATCTGCC 1

RESULT 1958  
 ABZ83986  
 ID ABZ83986 standard; DNA; 20 BP.  
 AC  
 XX ABZ83986;  
 XX  
 DT 14-MAY-2003 (first entry)  
 XX  
 DE Toxicologically relevant rat PCR primer #1145.  
 XX  
 KW Toxicologically relevant gene; toxicological response; PCR primer; ss.  
 KW  
 OS Rattus sp.  
 OS Synthetic.  
 XX  
 FN WO2003016500-A2.  
 XX  
 XX 27-FEB-2003.  
 PD  
 XX 16-AUG-2002; 2002WO-US026514.  
 PF  
 XX 16-AUG-2001; 2001US-0313080P.  
 PR  
 XX (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.  
 PA  
 XX Neft RE, Dunn RT, Adkins K, Pickett GG, Kier LD, Schweiser K;  
 PI Alen P;  
 FI  
 XX WPI; 2003-268322/26.  
 DR  
 XX  
 XX  
 PT Determining a toxicological response to an agent, useful for screening of  
 PT drugs, comprises comparing the expression profile of one or more human  
 PT toxic response genes to a reference gene expression profile indicative of  
 PT toxicity.  
 XX  
 PS Claim 1; Page 326; 455pp; English.  
 XX  
 CC The present invention describes a method (M1) for determining a  
 CC toxicological response to an agent, which comprises comparing the  
 CC expression profile of one or more human toxic response genes to a  
 CC reference gene expression profile indicative of toxicity, and so  
 CC determining the presence of a toxic response to the agent. Also  
 CC described: (1) an array comprising one or more polynucleotides selected  
 CC from the genes corresponding to the partial sequences given in ABZ82842  
 CC ; and (2) determining if a gene putatively identified to be a toxic  
 CC response gene plays a role on toxic response pathways by determining the  
 CC expression profile of the gene after exposure of cells or a human subject  
 CC to a known toxic pharmaceutical or industrial agent, comprising: (a)  
 CC exposing cells to an agent or isolating cells from a human subject who  
 CC was exposed to an agent; (b) obtaining the test gene expression profile  
 CC for a putatively identified toxic response gene after exposure to a known  
 CC toxic pharmaceutical or industrial agent; and (c) comparing the test  
 CC profile to the expression profile of a gene with a similar function or  
 CC comparing the test profile to the expression profile of that gene after  
 CC exposure to other known toxic compounds. The methods are useful for  
 CC predicting and determining toxicological responses on a cellular, organ  
 CC or system level. The arrays comprising the human genes are useful for  
 CC toxicological screening of drugs, pharmaceutical compounds and chemicals  
 XX  
 SQ Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 357 TGAAGGCGACGTGCTCAGG 376  
 || ||||| ||||| |||||

Db 1 TGAAGGCGACGTGCTCAGG 20

RESULT 1959  
 ADA26797/c  
 ID ADA26797 standard; DNA; 20 BP.  
 AC  
 XX ADA26797;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Human PRL-3 forward PCR primer #81.  
 XX  
 KW Metastasis; neoplastic growth; detection; prediction;  
 KW neoplastic growth marker; drug screening; cancer; tumour;  
 KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;  
 KW drug targeting; chromosome 8q24.3; human;  
 KW protein tyrosine phosphatase type IVA member 3; PRL-3; cytostatic;  
 KW reverse transcription-PCR; RT-PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 OS  
 XX WO2003031930-A2.  
 XX  
 PD 17-APR-2003.  
 PD  
 XX 02-OCT-2002; 2002WO-US031247.  
 PF  
 XX 09-OCT-2001; 2001US-0327332P.  
 PR  
 XX (UWJO ) UNIV JOHNS HOPKINS.  
 PA  
 XX Vogelstein B, Kinzler KW, Saha S, Bardelli A;  
 PI  
 XX WPI; 2003-393457/37.  
 DR  
 XX  
 XX  
 PT Identifying regions of neoplastic growth in a human body, useful for  
 PT detecting or predicting metastasis, comprises administering to the human  
 PT body an antibody or peptide that specifically binds to a protein marker  
 PT of neoplastic growth.  
 XX  
 PS Example 2; Page 22; 42pp; English.  
 XX  
 CC The invention relates to methods for identifying regions of neoplastic  
 CC growth in a human patient, especially for detecting or predicting  
 CC metastasis. The methods involve determining whether a neoplastic growth  
 CC marker protein is overexpressed, either by the use of an antibody  
 CC specific for the protein or by the use of PCR or hybridisation to detect  
 CC nucleic acids encoding the marker proteins. A set of neoplastic growth  
 CC markers are disclosed (SAGE (serial analysis of gene expression) tags for  
 CC these are given in ADA26759-ADA26796), with protein tyrosine phosphatase  
 CC type IVA member 3 (also known as PRL-3) being a preferred neoplastic  
 CC growth marker. The neoplastic growth markers are specifically expressed  
 CC at a higher level in metastatic cancers, compared with advanced and early  
 CC stage cancers and normal cells from which the cancer is derived.  
 CC Overexpression of the neoplastic growth markers is taken as an indication  
 CC that the tissue has a propensity to metastasise. The invention also  
 CC encompasses methods for treating a patient with an advanced or metastatic  
 CC cancer, and for identifying candidate drugs for treating advanced or  
 CC metastatic cancers. The methods of the invention are useful for  
 CC identifying regions of neoplastic growth, for detecting or predicting  
 CC metastasis, or identifying candidate drugs for treating advanced or  
 CC metastatic cancers. The invention is particularly applicable to  
 CC gastrointestinal, prostate, breast or colorectal cancers. Antibodies  
 CC which bind to the neoplastic growth marker proteins are additionally  
 CC useful for diagnostic imaging and for targeting cytotoxic or  
 CC chemotherapeutic drugs. The present sequence represents a reverse  
 CC transcription-PCR (RT-PCR) primer used to study the upregulation of the  
 CC human PRL-3 gene (located at chromosome 8q24.3) in an example of the  
 CC invention.  
 XX  
 SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;



RESULT 1962  
ADJ95311  
ID ADJ95311 standard; DNA; 20 BP.  
AC  
XX  
AC ADJ95311;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Novel NOVX gene sequence reverse primer #29.  
XX  
KW antidiabetic; anorectic; cardiatic; hypotensive; antiarteriosclerotic;  
KW anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic;  
KW neuroprotective; antiparkinsonian; anticonvulsant; osteopathic;  
KW antiarthritis; antiinflammatory; dermatological; antisthmatic;  
KW antileptic; gene therapy; metabolic disorder; diabetes; obesity;  
KW infectious disease; anorexia; cancer; cardiovascular disease;  
KW hypertension; atherosclerosis; neurodegenerative disorder;  
KW Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder;  
KW osteoarthritis; hematopoietic disorder; inflammatory skin disorder;  
KW asthma; dyslipidemia; neurogenesis; cell differentiation;  
KW cell proliferation; hematopoiesis; wound healing; angiogenesis;  
KW chromosome mapping; tissue typing; pharmacogenomic; primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX  
FN WO2003040325-A2.  
XX  
PD 15-MAY-2003.  
XX  
PF 05-NOV-2002; 2002WO-US035464.  
XX  
PR 05-NOV-2001; 2001US-0338626P.  
PR 06-NOV-2001; 2001US-0333072P.  
PR 09-NOV-2001; 2001US-0348283P.  
PR 15-NOV-2001; 2001US-0335610P.  
PR 16-NOV-2001; 2001US-0338543P.  
PR 20-NOV-2001; 2001US-0331630P.  
PR 20-NOV-2001; 2001US-0331641P.  
PR 21-NOV-2001; 2001US-0332152P.  
PR 28-NOV-2001; 2001US-0333461P.  
PR 28-NOV-2001; 2001US-0333912P.  
PR 29-NOV-2001; 2001US-0334027P.  
PR 29-NOV-2001; 2001US-0334300P.  
PR 30-NOV-2001; 2001US-0334421P.  
PR 30-NOV-2001; 2001US-0334526P.  
PR 04-DEC-2001; 2001US-0336576P.  
PR 04-DEC-2001; 2001US-0336664P.  
PR 07-DEC-2001; 2001US-0338314P.  
PR 07-DEC-2001; 2001US-0338390P.  
PR 10-DEC-2001; 2001US-0339006P.  
PR 10-DEC-2001; 2001US-0339008P.  
PR 11-DEC-2001; 2001US-0339286P.  
PR 01-FEB-2002; 2002US-0353280P.  
PR 01-FEB-2002; 2002US-0353288P.  
PR 04-FEB-2002; 2002US-0354392P.  
PR 04-FEB-2002; 2002US-0354393P.  
PR 04-FEB-2002; 2002US-0354409P.  
PR 27-FEB-2002; 2002US-0359944P.  
PR 27-FEB-2002; 2002US-0360148P.  
PR 05-MAR-2002; 2002US-0361790P.  
PR 05-MAR-2002; 2002US-0361833P.  
PR 05-MAR-2002; 2002US-0361925P.  
PR 05-MAR-2002; 2002US-0362230P.  
PR 05-MAR-2002; 2002US-0362625P.  
PR 13-MAR-2002; 2002US-0364000P.  
PR 13-MAR-2002; 2002US-0364181P.  
PR 13-MAR-2002; 2002US-0364182P.  
PR 13-MAR-2002; 2002US-0364197P.  
PR 13-MAR-2002; 2002US-0364227P.  
PR 17-MAY-2002; 2002US-0381621P.  
PR 28-MAY-2002; 2002US-0383675P.  
PR 17-JUL-2002; 2002US-0396703P.  
PR 06-AUG-2002; 2002US-0401552P.

PR 07-AUG-2002; 2002US-0401594P.  
PR 07-AUG-2002; 2002US-0401787P.  
PR 15-AUG-2002; 2002US-0403619P.  
PR 20-AUG-2002; 2002US-0404821P.  
PR 23-AUG-2002; 2002US-0405368P.  
PR 23-AUG-2002; 2002US-0405402P.  
PR 23-AUG-2002; 2002US-0405496P.  
PR 23-AUG-2002; 2002US-0405631P.  
PR 26-AUG-2002; 2002US-0406125P.  
PR 04-NOV-2002; 2002US-00287226.  
XX  
XX (CURA-) CURAGEN CORP.  
XX  
PA Agee ML, Alsobrook JP, Berghs C, Boldog FL, Burgess CE, Chant JS;  
PI Chaudhuri A, Dipippo VA, Edinger SR, Eissen A, Ellerman K;  
PI Gangolli EA, Gerlach VL, Ji W, Kekuda R, Khramtsov NV;  
PI Li L, Malyankar UM, Macdougall JR, Mezes PS, Miller CE, Millet I;  
PI Ooi CE, Ort T, Padigaru M, Patturajan M, Rastelli L, Rieger DK;  
PI Rothenberg ME, Shenoy SG, Spaderna SK, Spytek RA, Taupier RJ;  
PI Vernet CM, Zerhusen BD, Zhong M;  
XX WPI; 2003-441551/41.  
DR  
XX New isolated NOVX polypeptides and polynucleotides, useful for  
XX preventing, diagnosing or treating NOVX-associated disorders, e.g.  
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,  
PT asthma, or infections.  
XX  
PS Disclosure; SEQ ID NO 539; 800pp; English.  
XX  
CC The invention relates to novel isolated polypeptides, mature forms of  
CC these, or a sequence that is at least 95 % identical to, or having one or  
CC more conservative amino acid substitutions in the polypeptides. The  
CC polypeptides, nucleic acid molecules and antibodies are useful in the  
CC manufacture of a medicament for treating a syndrome associated with a  
CC human disease, preferably a NOVX-associated disorder. The nucleic acid  
CC molecules, polypeptides and antibodies are useful for treating,  
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,  
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and  
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,  
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),  
CC hematopoietic disorders, inflammatory skin disorders, asthma, and various  
CC dyslipidemias. The nucleic acids and polypeptides may also be used as  
CC targets for the identification of small molecules that modulate or  
CC inhibit e.g. neurogenesis, cell differentiation, cell proliferation,  
CC hematopoiesis, wound healing and angiogenesis, in gene therapy, in  
CC generation of antibodies that bind immunospecifically to NOVX substances  
CC for use in therapeutic or diagnostic methods. The nucleic acids are  
CC further used as hybridization probes, in chromosome mapping, tissue  
CC typing, preventive medicine, and pharmacogenomics. This sequence  
CC corresponds to a reverse primer for the genes encoding one of the NOVX  
CC polypeptides of the invention.  
XX  
SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 275 CTGCTCTCTGGGAACTTCGT 294  
Db 1 CAGCTCTCTGGGTAATTTGT 20  
RESULT 1963  
ADL25030/c  
ID ADL25030 standard; DNA; 20 BP.  
XX  
XX ADL25030;  
AC  
XX  
XX 20-MAY-2004 (first entry)  
XX

DE Intestinal epithelium/peyer's patch M cell-associated PCR primer #175.  
 XX Intestinal epithelium cell development; peyer's patch M cell development;  
 XX inflammatory bowel disease; glutenenteropathy; infectious disease;  
 KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;  
 KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;  
 KW immune system disorder; hypersensitivity; anaphylaxis;  
 KW blood group incompatibility; ss; human; PCR; primer.  
 XX Homo sapiens.  
 XX WO200280852-A2.  
 XX 17-OCT-2002.  
 XX 04-APR-2002; 2002WO-US010873.  
 XX 04-APR-2001; 2001US-0281416P.  
 XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.  
 XX Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;  
 XX WPI; 2003-075470/07.  
 XX Novel isolated or purified polypeptide encoded by genes associated with  
 PT intestinal epithelium or M cell development, differentiation or function,  
 PT useful for treating autoimmune diseases and infectious diseases.  
 XX Disclosure; SEQ ID NO 540; 152pp; English.  
 XX The invention comprises DNA sequences which are associated with  
 CC intestinal epithelium and peyer's patch M cells. The DNA sequences of the  
 CC invention are useful for assessing, modifying, modulating or regulating  
 CC intestinal epithelium or M cell development. The DNA sequences of the  
 CC invention are also useful in the treatment of: inflammatory bowel  
 CC disease, glutenenteropathy, infectious diseases, autoimmune diseases  
 CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's  
 CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),  
 CC diseases or disorders of the immune system, hypersensitivity,  
 CC anaphylaxis, and blood group incompatibility. The present DNA sequence  
 CC represents a PCR primer that was used to amplify an intestinal  
 CC epithelium/peyer's patch M cell-associated DNA sequence of the invention.  
 XX  
 XX Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 380 CAGCCACGTCCTCGATGAG 399  
 DB 20 CAGCCACGTCACAGAAATG 1  
 RESULT 1964  
 ADM07061  
 ID ADM07061 standard; DNA; 20 BP.  
 XX ADM07061;  
 XX 20-MAY-2004 (first entry)  
 XX Aspergillus fumigatus Essential For Growth DNA PCR primer #16.  
 XX ss; primer; fungicide; gene therapy; Essential For Growth; EFG;  
 KW fungal infection.  
 XX Aspergillus fumigatus.  
 XX WO2003076464-A2.  
 XX 18-SEP-2003.  
 PD

XX 13-MAR-2003; 2003WO-IB001374.  
 XX 13-MAR-2002; 2002US-0363543P.  
 PR 19-DEC-2002; 2002US-0434407P.  
 XX (FARB ) BAYER CROSCIENCE SA.  
 PA (INSP ) INST PASTEUR.  
 XX Grosjean-Cournoyer M, D'enfert CD, Villalba F, Lebrun M;  
 PI Beffa R;  
 XX WPI; 2003-748377/70.  
 XX New nucleic acid encoding an Essential For Growth (EFG) polypeptide,  
 PT useful for preparing a composition for treating fungal infection caused  
 PT by Aspergillus fumigatus.  
 XX Disclosure; SEQ ID NO 76; 259pp; English.  
 XX The invention relates to a nucleic acid encoding an Essential For Growth  
 CC (EFG) polypeptide. The nucleic acid is useful for preparing a composition  
 CC for treating fungal infection caused by Aspergillus fumigatus. This  
 CC sequence corresponds to a PCR primer for one of the genes of the  
 CC invention.  
 XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1045 GCCCGAGCCAGTCAATCCC 1064  
 DB 1 GCGTGAGCCTAGTCCATCAC 20  
 RESULT 1965  
 ADM57531  
 ID ADM57531 standard; DNA; 20 BP.  
 XX ADM57531;  
 XX 03-JUN-2004 (first entry)  
 XX M. tuberculosis PCR primer katG-2154,872-SEQ-R.  
 XX antibacterial; vaccine; mmp16; Mycobacterium; BCG; Tbd1; ss; PCR; primer.  
 XX Mycobacterium tuberculosis.  
 XX EPI338657-A1.  
 XX 27-AUG-2003.  
 XX 25-FEB-2002; 2002EP-00290458.  
 XX 25-FEB-2002; 2002EP-00290458.  
 XX (INSP ) INST PASTEUR.  
 XX Cole S, Brosch R, Gordon S, Eiglmeyer K, Garnier T;  
 XX WPI; 2003-699254/67.  
 XX New Tbd1 nucleic acids having the mutation CTG to CGG at codon 463 of  
 PT gene katG, useful for distinguishing Mycobacterium tuberculosis infection  
 PT from M. africanum, M. canettii, M. microti, M. bovis, or M. bovis BCG  
 PT infection.  
 XX Disclosure; Page 21; 73pp; English.  
 XX The invention relates to a novel isolated or purified nucleic acid. A  
 CC

CC polypeptide encoded by a nucleic acid of the invention has antibacterial  
 CC activity, and may have a use in a vaccine. The nucleic acid is a Tbd1  
 CC nucleic acid having a fully defined sequence of 3953 bp given in the  
 CC specification. The Tbd1 deletion or mmpL6 551 polymorphism is useful as a  
 CC genetic marker for the differentiation of Mycobacterium strain of M.  
 CC tuberculosis complex. The genetic marker in association with at least one  
 CC genetic markers selected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8,  
 CC RD9, RD10, RD11, RD13, RD14, RD15, RD2, RD3, RD4, RD5, RD6, RD7, RD8,  
 CC gyrA95, oxyR'285, and pncA57, may be used for the differentiation of  
 CC Mycobacterium strain of M. tuberculosis complex. The nucleic acids may  
 CC also be used to distinguish an infection resulting from M. tuberculosis  
 CC from an infection resulting from M. africanum, M. canetti, M. microti, M.  
 CC bovis, M. bovis BCG. The present sequence is used in the exemplification  
 CC of the invention.

SQ Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 962 AGAAGTGTGTACACCGAGAC 981  
 Db 1 ACAAGCTGATCCACCGAGAC 20  
 |||||

RESULT 1966  
 ADM57474/c  
 ID ADM57474 standard; DNA; 20 BP.

XX AC ADM57474;

XX DT 03-JUN-2004 (first entry)

XX DE M. tuberculosis PCR primer RDS5A-Rv2348.int.F.

XX KW antibacterial; vaccine; mmpL6; Mycobacterium; BCG; Tbd1; ss; PCR; primer.

XX OS Mycobacterium tuberculosis.

XX PN EPI338657-A1.

XX PD 27-AUG-2003.

XX PF 25-FEB-2002; 2002EP-00290458.

XX PR 25-FEB-2002; 2002EP-00290458.

XX PA (INSP ) INST PASTEUR.

XX PI Cole S, Brosch R, Gordon S, Eiglmeier K, Garnier T;

XX DR WPI; 2003-699254/67.

XX PT New Tbd1 nucleic acids having the mutation CTG to CGG at codon 463 of  
 gene katG, useful for distinguishing Mycobacterium tuberculosis infection  
 from M. africanum, M. canetti, M. microti, M. bovis, or M. bovis BCG  
 infection.

XX PS Disclosure; Page 19; 73pp; English.

XX CC The invention relates to a novel isolated or purified nucleic acid. A  
 CC polypeptide encoded by a nucleic acid of the invention has antibacterial  
 CC activity, and may have a use in a vaccine. The nucleic acid is a Tbd1  
 CC nucleic acid having a fully defined sequence of 3953 bp given in the  
 CC specification. The Tbd1 deletion or mmpL6 551 polymorphism is useful as a  
 CC genetic marker for the differentiation of Mycobacterium strain of M.  
 CC tuberculosis complex. The genetic marker in association with at least one  
 CC genetic markers selected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8,  
 CC RD9, RD10, RD11, RD13, RD14, RD15, RD2, RD3, RD4, RD5, RD6, RD7, RD8,  
 CC gyrA95, oxyR'285, and pncA57, may be used for the differentiation of  
 CC Mycobacterium strain of M. tuberculosis complex. The nucleic acids may  
 CC also be used to distinguish an infection resulting from M. tuberculosis

CC from an infection resulting from M. africanum, M. canetti, M. microti, M.  
 CC bovis, M. bovis BCG. The present sequence is used in the exemplification  
 CC of the invention.

SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 43 GGAGGACCAACAGTGTGACT 62  
 Db 20 GGAGTAGCAGCAGCGTGATT 1  
 |||||

RESULT 1967  
 ADM34286/c

XX ID ADM34286 standard; DNA; 20 BP.

XX AC ADM34286;

XX DT 03-JUN-2004 (first entry)

XX DE Mouse p38 MAPK antisense oligonucleotide #13.

XX KW antisense; p38 mitogen activated protein kinase; p38 MAPK;  
 KW inflammatory disease; autoimmune disease; rheumatoid arthritis;  
 KW heart disease; ss; mouse.

XX OS Mus musculus.

XX FH Key Location/Qualifiers  
 FT modified\_base 1..20

FT /\*tag= b

FT /mod\_base= Other

FT /note= "All cytosines are 5-methyl cytosines"

FT modified\_base 1..5

FT /\*tag= a

FT /mod\_base= Other

FT /note= "2'-methoxyethoxy nucleotides"

FT modified\_base 6..15

FT /\*tag= c

FT /mod\_base= Other

FT /note= "Phosphorothioate linkages"

FT modified\_base 16..20

FT /\*tag= d

FT /mod\_base= Other

FT /note= "2'-methoxyethoxy nucleotides"

XX PN US2003176383-A1.

XX PD 18-SEP-2003.

XX PF 09-SEP-2002; 2002US-00238442.

XX PR 06-APR-1999; 99US-00286904.

XX DR 15-AUG-2000; 2000US-00640101.

XX PA (MONI/) MONIA B P.

XX PA (GAAR/) GAARDE W A.

XX PA (NERO/) NERO P.

XX PA (MCKA/) MCKAY R.

XX PI Monia BP, Gaarde WA, Nero P, Mckay R;

XX DR WPI; 2003-898587/82.

XX PT New antisense oligonucleotides for modulating p38 mitogen activated  
 PT protein kinase (MAPK) expression, useful for diagnosing, preventing or  
 PT treating diseases associated with p38 MAPK, e.g. inflammation or heart  
 PT disease.

XX PS Example 5; SEQ ID NO 75; 48pp; English.

XX The invention relates to an antisense oligonucleotide 8-30 nucleobases in  
CC length targeted to the 5'-untranslated region, translational start site,  
CC translational termination region or 3'-untranslated region of a nucleic  
CC acid molecule encoding a p38 mitogen activated protein kinase (MAPK). The  
CC where the antisense compound inhibits the expression of the p38 MAPK. The  
CC antisense oligonucleotide is useful for inhibiting the expression of p38  
CC MAPK in cells or tissues. It is also useful for treating an animal having  
CC a disease or condition associated with p38 MAPK, e.g. an inflammatory or  
CC an autoimmune disease (e.g. rheumatoid arthritis) or a heart disease. In  
CC addition, the compound is used for diagnostics, prophylaxis, or as  
CC research reagents or kits. The present sequence represents a p38 MAPK  
CC antisense oligonucleotide of the invention.  
XX  
SQ Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1153 GACATGTGGGGTGTGGGCTG 1172  
||||| ||| ||||| |||||  
Db 20 GACATCTGCTGTGGGCTG 1  
  
RESULT 1968  
ADM75855  
ID ADM75855 standard; DNA; 20 BP.  
XX  
AC ADM75855;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE Human Factor VIII gene clone primer, SEQ ID No 16.  
XX  
KW human Factor VIII; non-immunogenic; immunogenic; T-cell epitope;  
KW MHC class II; ligand; vaccine; immunogenicity; Gaucher's disease; ss;  
KW primer.  
XX  
OS Homo sapiens.  
XX  
FN WO2003087161-A1.  
XX  
PD 23-OCT-2003.  
XX  
PF 17-APR-2003; 2003WO-EP004063.  
XX  
PR 18-APR-2002; 2002EP-00008712.  
PR 24-MAR-2003; 2003EP-00006554.  
XX  
PA (MERE ) MERCK PATENT GMBH.  
XX  
PI Jones T, Baker M, Carr EJ;  
XX  
DR WPI; 2003-845307/78.  
XX  
PT New modified human Factor VIII molecule being substantially non-  
PT immunogenic or less immunogenic than non-modified human Factor VIII,  
PT useful in preparing a composition for treating e.g., Gaucher's disease.  
XX  
PS Example 2; SEQ ID NO 16; 68pp; English.  
XX  
XX The invention relates to a novel modified human Factor VIII molecule. The  
CC modified human Factor VIII molecule being substantially non-immunogenic  
CC or less immunogenic than a non-modified human Factor VIII and having  
CC essentially the same biological specificity and activity when used in  
CC vivo. The modified human Factor VIII molecule comprises specifically  
CC altered amino acid residues compared with the non-modified parental  
CC molecule, where the altered amino acid residues cause a reduction or an  
CC elimination of one or more of the T-cell epitopes, which act in the  
CC parental non-modified molecule as MHC class II binding ligands and  
CC stimulate T-cells. The potential MHC class II binding activity peptide is  
CC useful for the manufacture of the modified Factor VIII molecule or a

CC vaccine in order to reduce immunogenicity to Factor VIII in a patient.  
CC The modified Factor VIII molecule is useful in preparing a composition  
CC for treating e.g., Gaucher's disease. This polynucleotide sequence  
CC represents a primer used in the exemplification of the invention.  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1700 ACTCTCTCCCTACCTGCGCTG 1719  
||||| ||| ||||| |||||  
Db 1 AATCTCTGCTTACCAGCATG 20  
  
RESULT 1969  
ADN60140/c  
ID ADN60140 standard; DNA; 20 BP.  
XX  
AC ADN60140;  
XX  
DT 01-JUL-2004 (first entry)  
XX  
DE Human helicase-moi, antisense oligonucleotide #60.  
XX  
KW Cytostatic; Antisense therapy; ss; human; helicase-moi; inflammation;  
KW hyperproliferative disorder; RNA-mediated interference; probe.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= Other  
FT /note= "Phosphorothioate linkages. All cytidines are 5'-  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= Other  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= Other  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
XX  
PN US2003176380-A1.  
XX  
XX 18-SEP-2003.  
XX  
XX 31-MAY-2002; 2002US-00160632.  
XX  
XX 10-MAY-2001; 2001US-00853768.  
XX  
XX (WARD/) WARD D T.  
XX (WATT/) WATT A T.  
XX  
XX Ward DT, Watt AT;  
XX  
XX WPI; 2003-898586/82.  
XX  
XX New antisense oligonucleotides for modulating helicase-moi expression,  
PT useful for diagnosing, preventing or treating diseases or conditions  
PT associated with helicase-moi, e.g. inflammation or hyperproliferative  
PT disorders.  
XX  
XX Example 14; SEQ ID NO 73; 56pp; English.  
XX  
XX The invention relates to antisense oligonucleotides, compositions and  
CC methods for modulating the expression of helicase-moi. The  
CC oligonucleotides are used in treating an animal having a disease or  
CC condition associated with helicase-moi, such as inflammation, a  
CC hyperproliferative disorder or a condition that arises from RNA-mediated

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors



CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 657 CGTCTACAAAGGCAAAAGCA 676

|||||  
Dd 20 CTCTCAAAAGGTCAAAAGCA 1

RESULT 1972

ABD21831/c

ID ABD21831 standard; DNA; 20 BP.

XX ABD21831;

XX 29-JUL-2004 (first entry)

DE Human stannocalcin-derived oligo SEQ ID 843.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 843; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine, (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX

SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 763 CTGCTCAAGGACCTCAAAACA 782

|||||  
Dd 20 CTGCTCAAGGACCAAGGCA 1

RESULT 1973

ABD24306

ID ABD24306 standard; DNA; 20 BP.

XX ABD24306;

XX 29-JUL-2004 (first entry)

DE AT095013-derived oligonucleotide DNA SEQ ID 3318.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

XX WO200285309-A2.

XX





RESULT 1975  
ABD23363/c  
ID ABD23363 standard; DNA; 20 BP.  
XX  
AC ABD23363;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Human myosin X-derived oligonucleotide SEQ ID 2375.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPITG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 2375; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1285 GGCATCCCTGTCACAGGGA 1304  
DB 20 GGCATCCGACACGCGATGA 1  
RESULT 1976  
ABD22665/c  
ID ABD22665 standard; DNA; 20 BP.  
XX  
AC ABD22665;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Human myosin X-derived oligonucleotide SEQ ID 1677.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPITG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 1677; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to



Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15; SEQ ID NO 107; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or surfactant hypoproduction are associated with inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

299 CACGGGGGCCATTCAGCTCT 318  
||| ||||| |||||  
1 CACTGTCCCGCCAGCTCT 20

RESULT 1979  
ABD24492/c  
ID ABD24492 standard; DNA; 20 BP.  
XX ABD24492;  
AC ABD24492;  
XX  
XX 29-JUL-2004 (first entry)  
XX  
XX A1652901-derived oligonucleotide SEQ ID 3504.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
XX  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
PD

23-APR-2002; 2002WO-US013143.  
24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-093058/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 3504; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or surfactant hypoproduction are associated with inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

1020 GCTCAAGCTGGCTGACTTTG 1039  
||| ||||| |||||  
20 GCTAAAGTGGCTGCTTTG 1

RESULT 1980  
ABD26680  
ID ABD26680 standard; DNA; 20 BP.  
XX ABD26680;  
AC ABD26680;  
XX  
XX 29-JUL-2004 (first entry)  
XX  
XX R00103-derived oligonucleotide SEQ ID 5692.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW



```

KW amyloid deposition; neurodegeneration; Alzheimer's disease; infection;
KW inflammation; tumour; antisense.
XX
OS Synthetic.
OS Homo sapiens.
PN US2003224512-A1.
XX
XX 04-DEC-2003.
XX
XX 31-MAY-2002; 2002US-00159942.
XX
XX 31-MAY-2002; 2002US-00159942.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-051909/05.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding a
XX beta-site amyloid precursor protein (APP)-cleaving enzyme, useful for
XX treating diseases associated with beta-site APP-cleaving enzyme, e.g.
XX neurodegeneration.
XX
XX Example 15; SEQ ID NO 75; 58pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding a beta-site amyloid precursor protein (APP)-cleaving enzyme. The
XX antisense oligonucleotides and compounds are useful for inhibiting the
XX expression of beta-site amyloid precursor protein (APP)-cleaving enzyme,
XX modulating amyloid deposition in neurons, altering the expression of a
XX splice variant of beta-site APP-cleaving enzyme, and for treating
XX diseases or conditions associated with expression of beta-site APP-
XX cleaving enzyme e.g. neurodegeneration or Alzheimer's disease. The
XX antisense compounds are also useful as research reagents and kits, or in
XX diagnostic, therapeutic and prophylaxis applications, e.g. to prevent or
XX delay infection, inflammation or tumour formation. The present sequence
XX represents a human APP-cleaving enzyme antisense oligonucleotide.
XX
XX Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 876 GGATGACTGTGGACATCA 895
Db 20 GGAAGACTGTGGCTACAACA 1
|||||
|||||

RESULT 1983
ADG86742
ID ADG86742 standard; DNA; 20 BP.
XX
XX AC ADG86742;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human APP-cleaving enzyme target region ISIS 140502.
XX
XX ss; human; beta-site amyloid precursor protein; APP-cleaving enzyme;
XX amyloid deposition; neurodegeneration; Alzheimer's disease; infection;
XX inflammation; tumour.
XX
XX Homo sapiens.
XX
XX US2003224512-A1.
XX
XX 04-DEC-2003.
XX
XX 31-MAY-2002; 2002US-00159942.
XX
XX

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PR 31-MAY-2002; 2002US-00159942.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-051909/05.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding a
XX beta-site amyloid precursor protein (APP)-cleaving enzyme, useful for
XX treating diseases associated with beta-site APP-cleaving enzyme, e.g.
XX neurodegeneration.
XX
XX Example 15; SEQ ID NO 125; 58pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding a beta-site amyloid precursor protein (APP)-cleaving enzyme. The
XX antisense oligonucleotides and compounds are useful for inhibiting the
XX expression of beta-site amyloid precursor protein (APP)-cleaving enzyme,
XX modulating amyloid deposition in neurons, altering the expression of a
XX splice variant of beta-site APP-cleaving enzyme, and for treating
XX diseases or conditions associated with expression of beta-site APP-
XX cleaving enzyme e.g. neurodegeneration or Alzheimer's disease. The
XX antisense compounds are also useful as research reagents and kits, or in
XX diagnostic, therapeutic and prophylaxis applications, e.g. to prevent or
XX delay infection, inflammation or tumour formation. The present sequence
XX represents a human APP-cleaving enzyme target region.
XX
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 330 TGTGACGAGGACTTCACA 349
Db 1 TGTGACGAGTGCATCAGGA 20
|||||
|||||

RESULT 1984
ADG64275/C
ID ADG64275 standard; DNA; 20 BP.
XX
XX AC ADG64275;
XX
XX 11-MAR-2004 (first entry)
XX
XX Y copy of Adlican reverse primer cfi-4810.
XX
XX Y chromosome; chromosome Y; SKY1; sy83; Y-specific growth gene; GCY;
XX primer; sex-related height difference; height; primer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO2003091381-A2.
XX
XX 06-NOV-2003.
XX
XX 25-APR-2003; 2003WO-EP004546.
XX
XX 26-APR-2002; 2002GB-00009640.
XX
XX 01-JUL-2002; 2002GB-00015188.
XX
XX (RAPP/) RAPPOLD G A.
XX
XX Rappold GA, Kirsch S;
XX WPI; 2004-108240/11.
XX
XX An isolated region of the Y chromosome between SKY1 and sy83 which
XX encompasses the Y-specific growth gene GCY, for identifying the presence
XX or absence of a GCY gene associated with height.
XX

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XX PS Claim 10; Page 31; 54pp; English.
XX CC The present invention describes an isolated region of the Y chromosome
XX CC between SKY1 and sY83 which encompasses the Y-specific growth gene GCY.
XX CC Also described: (1) an isolated GCY protein, encoded by a region of the Y
XX CC chromosome within the interval SKY1 and sY83; (2) a nucleic acid primer
XX CC having a nucleic acid sequence selected from a nucleic acid sequence as
XX CC shown in Tables 2.5, 6.7A, 7B, 7C or 8 given in the specification; (3)
XX CC studying GCY localisation or identifying a GCY gene associated with
XX CC height comprising the use of a primer in (2) to selectively amplify or
XX CC detect a region of a nucleic acid molecule; (4) an isolated protein
XX CC having greater than 65% homology to the GCY protein of (1), and which
XX CC contributes to the sex-related height difference in humans; and (5) use
XX CC of a nucleic acid molecule comprising at least a portion of the isolated
XX CC region of the Y chromosome between markers SKY8 and sY83, or a sequence
XX CC complementary to it, to identify the presence or absence of a GCY gene
XX CC associated with height. The isolated region of the Y chromosome between
XX CC SKY1 and sY83, or a sequence complementary to it, is used to identify the
XX CC presence or absence of a GCY gene associated with height. The primer is
XX CC used for studying GCY localisation or identifying a GCY gene associated
XX CC with height by selective amplification. The present sequence is used in
XX CC the exemplification of the present invention.
XX CC
XX CC Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
OY 56 TGTGACTGCTGAACCCAGG 75
DB 20 TGTCACTGCTGAACCGAG 1
    ||| ||||| ||||| |||
XX
XX RESULT 1985
XX ADG72074/C
XX ID ADG72074 standard; DNA; 20 BP.
XX AC ADG72074;
XX DT 11-MAR-2004 (first entry)
XX DE Human SREBP-1 antisense oligonucleotide ISIS 220071.
XX KW Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
XX KW antisense gene therapy;
XX KW sterol regulatory element-binding transcription factor; SREBF;
XX KW metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
XX KW hyperlipidaemia.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate linkages. All cytidines are 5-
XX FT methylcytidines"
XX modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl residues"
XX modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl residues"
XX
XX US2003224515-A1.
XX FT
XX PD 04-DEC-2003.
XX PF 04-JUN-2002; 2002US-00161996.

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XX PR 04-JUN-2002; 2002US-00161996.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Baker BF, Dobie KW,
XX DR WPI; 2004-022079/02.
XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX FT nucleic acid encoding sterol regulatory element-binding protein-1, useful
XX FT for treating diabetes, atherosclerosis or hyperlipidemia.
XX
XX PS Example 15; SEQ ID NO 69; 112pp; English.
XX
XX CC The invention relates to a compound 8-80 nucleobases in length targeted
XX CC to, and which specifically hybridises with a nucleic acid molecule
XX CC encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
XX CC as sterol regulatory element-binding transcription factor, SREBF), and
XX CC inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
XX CC Also included are a compound 8-80 nucleobases in length that specifically
XX CC hybridises with at least an 8-nucleobase portion of an active site on a
XX CC nucleic acid molecule encoding sterol regulatory element-binding protein-
XX CC 1, a composition comprising the compound and a carrier or diluent,
XX CC inhibiting the expression of sterol regulatory element-binding protein-1
XX CC in cells or tissues (by contacting the cells or tissues with the compound
XX CC so that expression of sterol regulatory element-binding protein-1 is
XX CC inhibited) and treating an animal having a disease or condition
XX CC associated with sterol regulatory element-binding protein-1 by
XX CC administering to the animal a therapeutic or prophylactic amount of the
XX CC compound so that expression of sterol regulatory element-binding protein-
XX CC 1 is inhibited. The antisense oligonucleotide comprises at least one
XX CC modified internucleoside linkage (preferably a phosphorothioate linkage),
XX CC at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
XX CC moiety) or at least one modified nucleobase (preferably 5-
XX CC methylcytosine). The compound, composition and methods are useful for
XX CC treating a disease or condition associated with sterol regulatory element
XX CC -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
XX CC cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
XX CC are also useful in research and diagnostics for modulating the expression
XX CC of sterol regulatory element-binding protein-1. The present sequence is
XX CC an antisense oligonucleotide targeting human SREBP-1.
XX
XX SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
OY 1026 GCTGGCTGACTTGGCCTGG 1045
DB 20 GCAGGCTGACCTGGACCTGG 1
    || ||||| ||| |||||
XX
XX RESULT 1986
XX ADG72208
XX ID ADG72208 standard; cDNA; 20 BP.
XX AC ADG72208;
XX XX
XX DT 11-MAR-2004 (first entry)
XX DE Human SREBP-1 target site #45.
XX
XX KW Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
XX KW antisense gene therapy;
XX KW sterol regulatory element-binding transcription factor; SREBF;
XX KW metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
XX KW hyperlipidaemia.
XX OS Homo sapiens.
XX XX
XX PN US2003224515-A1.

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XX PD 04-DEC-2003.  
 XX PF 04-JUN-2002; 2002US-00161996.  
 XX PR 04-JUN-2002; 2002US-00161996.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Freier SM, Baker BF, Dobie KW;  
 XX DR WPI; 2004-022079/02.  
 XX  
 PT New compounds, particularly antisense oligonucleotides targeted to a  
 PT nucleic acid encoding sterol regulatory element-binding protein-1, useful  
 PT for treating diabetes, atherosclerosis or hyperlipidemia.  
 XX  
 PS Example 16; SEQ ID NO 203; 112pp; English.  
 XX  
 CC The invention relates to a compound 8-80 nucleobases in length targeted  
 CC to, and which specifically hybridises with a nucleic acid molecule  
 CC encoding sterol regulatory element-binding protein-1 (SREBP-1, also known  
 CC as sterol regulatory element-binding transcription factor, SREBF), and  
 CC inhibits the expression of SREBP-1. i.e. is an antisense oligonucleotide.  
 CC Also included are a compound 8-80 nucleobases in length that specifically  
 CC hybridises with at least an 8-nucleobase portion of an active site on a  
 CC nucleic acid molecule encoding sterol regulatory element-binding protein-1  
 CC 1, a composition comprising the compound and a carrier or diluent,  
 CC inhibiting the expression of sterol regulatory element-binding protein-1  
 CC in cells or tissues (by contacting the cells or tissues with the compound  
 CC so that expression of sterol regulatory element-binding protein-1 is  
 CC inhibited) and treating an animal having a disease or condition  
 CC associated with sterol regulatory element-binding protein-1 by  
 CC administering to the animal a therapeutic or prophylactic amount of the  
 CC compound so that expression of sterol regulatory element-binding protein-1  
 CC 1 is inhibited. The antisense oligonucleotide comprises at least one  
 CC modified internucleoside linkage (preferably 2'-O-methoxyethyl sugar  
 CC at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar  
 CC moiety) or at least one modified nucleobase (preferably 5-  
 CC methylcytosine). The compound, composition and methods are useful for  
 CC treating a disease or condition associated with sterol regulatory element  
 CC binding protein-1, such as a metabolic disorder e.g. diabetes, or a  
 CC cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They  
 CC are also useful in research and diagnostics for modulating the expression  
 CC of sterol regulatory element-binding protein-1. The present sequence is a  
 CC human SREBP-1 target region for the antisense oligonucleotides.  
 XX  
 SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1026 GCTGGCTGACTTTGGCTGG 1045  
 Db 1 GCAGGCTGACTGGACCTGG 20  
 RESULT 1987  
 ADH18063/c  
 ID ADH18063 standard; DNA; 20 BP.  
 XX AC ADH18063;  
 XX 11-MAR-2004 (first entry)  
 XX Human CHD5 PCR primer, SEQ ID NO:50.  
 XX Human; chromodomain helicase DNA-binding 5; CHD5; chromosome 1p36.3;  
 KW chromatin structure; chromatin unwinding; DNA repair; DNA recombination;  
 KW transcriptional regulation; gene expression; brain; neural development;  
 KW development regulation; oncogenesis; cancer; neural cancer; neuroblastoma;  
 KW neural tissue neoplasia; diagnosis; cancer; liver tumour; germ cell tumour;  
 KW breast cancer; colon cancer; liver tumour; PCR; primer; ss.  
 KW drug screening; cytostatic; gene therapy; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003106650-A2.  
 XX  
 PD 24-DEC-2003.  
 XX  
 PF 16-JUN-2003; 2003WO-US019027.

XX OS Homo sapiens.  
 XX WO2003097662-A1.  
 XX 27-NOV-2003.  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX 15-MAY-2002; 2002US-00147196.  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 PS Example 15; SEQ ID NO 52; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1565 TGCTGACTCAGCAGGCCA 1584  
 Db 20 TACTGTCTCTGTAGGCCA 1  
 RESULT 1988  
 ADH12228  
 ID ADH12228 standard; DNA; 20 BP.  
 XX AC ADH12228;  
 XX 11-MAR-2004 (first entry)  
 XX Human CHD5 PCR primer, SEQ ID NO:50.  
 XX Human; chromodomain helicase DNA-binding 5; CHD5; chromosome 1p36.3;  
 KW chromatin structure; chromatin unwinding; DNA repair; DNA recombination;  
 KW transcriptional regulation; gene expression; cell cycle control;  
 KW development regulation; oncogenesis; brain; neural development;  
 KW neural tissue neoplasia; diagnosis; cancer; neural cancer; neuroblastoma;  
 KW breast cancer; colon cancer; liver tumour; germ cell tumour;  
 KW drug screening; cytostatic; gene therapy; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003106650-A2.  
 XX  
 PD 24-DEC-2003.  
 XX  
 PF 16-JUN-2003; 2003WO-US019027.



```
XX PR 14-JUN-2002; 2002US-0388848P.
XX PA (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
XX PI Brodeur GM, White PS;
XX DR WPI; 2004-082186/08.
XX PT Novel chromodomain helicase DNA-binding (CHD) proteins, useful as
XX PT diagnostic and prognostic indicator of tumor, comprises amino terminus
XX PT having two PHD class zinc finger domains and two chromodomains.
XX PS Claim 29; SEQ ID NO 50; 124pp; English.
XX CC The invention relates to human chromodomain, helicase, DNA-binding 5
XX CC (CHD5; ADH12190) and cDNA encoding it (ADH12179). CHD5 is a novel member
XX CC of the CHD gene family, members of which have a profound effect on
XX CC chromatin structure and gene expression and which are thus likely to play
XX CC an important role in cell cycle control, regulation of development, and
XX CC oncogenesis. CHD5 comprises two N-terminal zinc finger domains of the PHD
XX CC (plant homeodomain) class, two chromodomains, a central region which
XX CC contains a predicted BRAH-box-type helicase domain and a putative SNF2
XX CC domain, and several nuclear localisation signals. The gene encoding CHD5
XX CC is located on chromosome 1p36.3, a region frequently deleted in a variety
XX CC of cancers including neuroblastoma, and the protein is preferentially
XX CC expressed in brain. CHD5 is therefore thought to be a modulator of normal
XX CC neural development and neoplasias of neural tissue origin. The invention
XX CC also relates to vectors and host cells comprising the CHD5 cDNA sequence;
XX CC an antibody against CHD5; a method of screening for modulators of CHD5
XX CC activity; a method of diagnosing cancer in a patient, where a reduced
XX CC level or absence of CHD5 or CHD5 nucleic acids indicates the presence of
XX CC cancer; treating cancer by administration of CHD5 protein, CHD5-encoding
XX CC nucleic acids or CHD5 mimetics; and CHD5-specific PCR primers (ADH12186-
XX CC ADH12247). The methods of the invention are useful in the diagnosis or
XX CC treatment of cancers such as neural cancers (e.g., neuroblastoma), breast
XX CC cancer, colon cancer, liver tumours and germ cell tumours. The CHD5
XX CC protein, CHD5 nucleic acids and anti-CHD5 antibodies are useful as
XX CC research tools to identify other proteins that are intimately involved in
XX CC chromatin unwinding, DNA repair and recombination, and transcriptional
XX CC regulation. Sequences ADH12186-ADH12247 represent specifically claimed
XX CC human CHD5 PCR primers.
XX SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 506 AGGGCTACCTGGAGAGCTG 525
Db 1 AGAACACCTGGAGAGCTG 20
RESULT 1989
ADH44477
ID ADH44477 standard; DNA; 20 BP.
XX AC ADH44477;
XX DT 25-MAR-2004 (first entry)
XX DB Extracellular-signal-regulated kinase-6, antisense oligonucleotide #3.
XX KW Antisense therapy; human; extracellular-signal-regulated kinase-6;
XX KW hyperproliferative disorder; cancer; inflammatory disorder;
XX KW neurodegenerative disorder; Alzheimer's disease; infection; inflammation;
XX KW tumour formation; cytostatic; antiinflammatory; neuroprotective;
XX KW nootropic; antibacterial; phosphorothioate; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
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FT modified_base 1. 20
FT /tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX PN US2003232772-A1.
XX XX 18-DEC-2003.
XX PF 17-JUN-2002; 2002US-00174465.
XX PR 17-JUN-2002; 2002US-00174465.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Dobie KW;
XX DR WPI; 2004-052189/05.
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT extracellular-signal-regulated kinase-6, useful for modulating expression
XX PT of extracellular-signal-regulated kinase-6 or treating cancer.
XX PS Example 15; SEQ ID NO 13; 45pp; English.
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding extracellular-signal-regulated kinase-6. The
XX CC antisense compound comprises an antisense oligonucleotide that
XX CC specifically hybridises with the nucleic acid and inhibits the expression
XX CC of extracellular-signal-regulated kinase-6. The antisense oligonucleotide
XX CC is a chimeric oligonucleotide. The antisense oligonucleotide comprises at
XX CC least one modified internucleoside linkage, preferably a phosphorothioate
XX CC linkage. It also comprises at least one modified sugar moiety, preferably
XX CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
XX CC further comprises at least one modified nucleobase, preferably a 5-
XX CC methylcytosine. The antisense oligonucleotides are useful for the
XX CC treatment of diseases such as hyperproliferative disorders, preferably
XX CC cancer, inflammatory disorders, and neurodegenerative disorders,
XX CC preferably Alzheimer's disease. The antisense compound can also be used
XX CC as prophylaxis, e.g. to prevent or delay infection, inflammation or
XX CC tumour formation. The present sequence represents an antisense
XX CC oligonucleotide used in the examples of the present invention.
XX SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 83 CCCGCGGCTCTGAGGTGCT 102
Db 1 CCACGAGCTCTGAGGTTCT 20
RESULT 1990
ADH44513/c
ID ADH44513 standard; DNA; 20 BP.
XX AC ADH44513;
XX DT 25-MAR-2004 (first entry)
XX DB Human extracellular-signal-regulated kinase-6 DNA target sequence #2.
XX KW Antisense therapy; human; extracellular-signal-regulated kinase-6;
XX KW hyperproliferative disorder; cancer; inflammatory disorder;
XX KW neurodegenerative disorder; Alzheimer's disease; infection; inflammation;
XX KW tumour formation; cytostatic; antiinflammatory; neuroprotective;
XX KW nootropic; antibacterial; ds.
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OS Homo sapiens.
XX US2003232772-A1.
XX PD 18-DEC-2003.
XX PF 17-JUN-2002; 2002US-00174465.
XX PR 17-JUN-2002; 2002US-00174465.
XX PS (ISIS-) ISIS PHARM INC.
XX PA Bennett CF, Dobie KW;
XX PI WPI; 2004-052189/05.
XX DR
XX DX New antisense compound targeted to a nucleic acid molecule encoding
XX PT extracellular-signal-regulated kinase-6, useful for modulating expression
XX PT of extracellular-signal-regulated kinase-6 or treating cancer.
XX PS Example 15; SEQ ID NO 49; 45pp; English.
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding extracellular-signal-regulated kinase-6. The
XX CC antisense compound comprises an antisense oligonucleotide that
XX CC specifically hybridizes with the nucleic acid and inhibits the expression
XX CC of extracellular-signal-regulated kinase-6. The antisense oligonucleotide
XX CC is a chimeric oligonucleotide. The antisense oligonucleotide comprises at
XX CC least one modified internucleoside linkage, preferably a phosphorothioate
XX CC linkage. It also comprises at least one modified sugar moiety, preferably
XX CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
XX CC further comprises at least one modified nucleobase, preferably a 5-
XX CC methylcytosine. The antisense oligonucleotides are useful for the
XX CC treatment of diseases such as hyperproliferative disorders, preferably
XX CC cancer, inflammatory disorders, and neurodegenerative disorders,
XX CC preferably Alzheimer's disease. The antisense compound can also be used
XX CC as prophylaxis, e.g. to prevent or delay infection, inflammation or
XX CC tumour formation. The present sequence represents a human extracellular-
XX CC signal-regulated kinase-6 DNA target sequence for an antisense
XX CC oligonucleotide.
XX SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 83 CCCGCGGCTCTGAGGTGCT 102
DB 20 CCACGAGCTCTGAGGTCT 1

RESULT 1991
ADI32297
ID ADI32297 standard; DNA; 20 BP.
XX AC ADI32297;
XX DT 15-APR-2004 (first entry)
XX DE Human iPFK-2 antisense oligonucleotide #2.
XX KW Human; inducible phosphofructokinase; iPFK-2; cancer;
XX KW inflammatory disease; therapy; antisense; phosphorothioate; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX PR 30-OCT-1998; 98US-00183846.

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PN US2003228568-A1.
XX 11-DEC-2003.
XX PF 02-JUN-2003; 2003US-00449512.
XX PR 31-OCT-1997; 97US-00961578.
XX PR 30-OCT-1998; 98US-00183846.
XX PR 25-SEP-2000; 2000US-00670216.
XX PA (BUCA/) BUCALA R J.
XX PA (CHES/) CHESNEY J A.
XX PA (MITC/) MITCHELL R A.
XX PI Bucala RJ, Chesney JA, Mitchell RA;
XX DX WPI; 2004-042217/04.
XX DR Novel inducible phosphofructokinase isoenzyme polypeptide expressed by
XX PT cDNA, useful for treating cancer and inflammatory disease.
XX PS Claim 4; SEQ ID NO 2; 32pp; English.
XX CC The invention relates to novel inducible phosphofructokinase isoenzyme
XX CC (iPFK-2) polypeptides (preferentially transcribed and translated in
XX CC tumour cells) and nucleic acid molecules encoding such polypeptides. The
XX CC invention also provides a cancer malignancy diagnostic assay. The assay
XX CC involves obtaining a sample of body or tumour fluid or tissue, performing
XX CC a sequence identity assay to detect the presence of iPFK-2 specific
XX CC sequences. The invention is useful for treating cancer and inflammatory
XX CC disease. The present sequence is human antisense oligonucleotide used in
XX CC the invention.
XX SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1679 CCNACTACATCTTCCCTGCT 1698
DB 1 CCNACGGCATCTTCGCGCT 20

RESULT 1992
ADI32296/c
ID ADI32296 standard; DNA; 20 BP.
XX AC ADI32296;
XX DT 15-APR-2004 (first entry)
XX DE Human iPFK-2 antisense oligonucleotide #1.
XX KW Human; inducible phosphofructokinase; iPFK-2; cancer;
XX KW inflammatory disease; therapy; antisense; phosphorothioate; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX PR 30-OCT-1998; 98US-00183846.
XX PR 31-OCT-1997; 97US-00961578.
XX PR 30-OCT-1998; 98US-00183846.

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PR 25-SEP-2000; 2000US-00670216.
XX (BUCA/) BUCALA R J.
PA (CHES/) CHESNEY J A.
PA (MITC/) MITCHELL R A.
XX Bucala RJ, Chesney JA, Mitchell RA;
PI WPI; 2004-042217/04.
DR
XX
XX Novel inducible phosphofructokinase isoenzyme polypeptide expressed by
PT cDNA, useful for treating cancer and inflammatory disease.
PT
XX
PS Example 4; SEQ ID NO 1; 32pp; English.
XX
CC The invention relates to novel inducible phosphofructokinase isoenzyme
CC (iPFK-2) polypeptides (preferentially transcribed and translated in
CC tumour cells) and nucleic acid molecules encoding such polypeptides. The
CC invention also provides a cancer malignancy diagnostic assay. The assay
CC involves obtaining a sample of body or tumour fluid or tissue, performing
CC a sequence identity assay to detect the presence of iPFK-2 specific
CC sequences. The invention is useful for treating cancer and inflammatory
CC disease. The present sequence is human antisense oligonucleotide used in
CC the invention.
XX
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1679 CCAACTACATCTTCCTCGCT 1698
Db ||||| ||||| |||||
20 CCAACGGCATCTTCGGGCT 1
RESULT 1993
AD112744/c
ID AD112744 standard; DNA; 20 BP.
XX
AC AD112744;
XX
XX 22-APR-2004 (first entry)
XX Biotin labelled PCR primer used to amplify the human LPIN2 DNA T220A SNP.
DE ss; type 2 diabetes; insulin resistance; human; lipin 2; LPIN2;
XX linkage disequilibrium polymorphism; antidiabetic; gene therapy; PCR;
KW primer; biotin.
XX
XX Homo sapiens.
XX
XX WO2004001071-A2.
XX
XX 31-DEC-2003.
XX
XX 25-JUN-2003; 2003WO-GB002730.
XX
XX 25-JUN-2002; 2002GB-00014682.
XX (OXAG-) OXAGEN LTD.
XX Pullen J, Holdstock J;
PI WPI; 2004-082513/08.
DR
XX
XX Determining whether an individual is predisposed to type 2 diabetes
XX and/or insulin resistance, useful for treating and/or preventing such
XX disease, comprises typing the LPIN2 gene region or LPIN2 protein of the
XX individual.
XX Example 4; Page 41; 152pp; English.
XX

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CC This invention relates to a novel method for determining whether an
CC individual is predisposed to type 2 diabetes and/or insulin resistance.
CC Specifically, it comprises typing the human lipin 2 (LPIN2) gene in order
CC to detect at least one of the four recognised single nucleotide
CC polymorphisms (SNPs) known to be associated with type 2 diabetes and
CC insulin resistance. The present invention further describes detecting
CC linkage disequilibrium polymorphisms that indicate a susceptibility or
CC genetic predisposition to these conditions. The method comprises
CC contacting a test agent with an LPIN2 mutated polynucleotide or
CC polypeptide and determining whether it is capable of binding and/or
CC modulating the activity or expression of the molecule. Accordingly, these
CC compositions exhibit antidiabetic activity and can be used to treat type
CC 2 diabetes and/or insulin resistance using gene therapy. This
CC oligonucleotide sequence is a biotin labelled PCR primer used to amplify
CC a human LPIN2 DNA fragment containing a SNP of the invention.
XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1227 GGACACAGCTACATTCATCT 1246
Db ||||| ||||| |||||
20 GGATCAGCTACATCTCCTCT 1
RESULT 1994
AD112708/c
ID AD112708 standard; DNA; 20 BP.
XX
AC AD112708;
XX
XX 22-APR-2004 (first entry)
XX Forward PCR primer used to amplify the human LPIN2 DNA exon 5.
DE ss; type 2 diabetes; insulin resistance; human; lipin 2; LPIN2;
XX linkage disequilibrium polymorphism; antidiabetic; gene therapy; PCR;
KW primer.
XX
XX Homo sapiens.
XX
XX WO2004001071-A2.
XX
XX 31-DEC-2003.
XX
XX 25-JUN-2003; 2003WO-GB002730.
XX
XX 25-JUN-2002; 2002GB-00014682.
XX (OXAG-) OXAGEN LTD.
XX Pullen J, Holdstock J;
PI WPI; 2004-082513/08.
DR
XX
XX Determining whether an individual is predisposed to type 2 diabetes
XX and/or insulin resistance, useful for treating and/or preventing such
XX disease, comprises typing the LPIN2 gene region or LPIN2 protein of the
XX individual.
XX Example 1; Page 36; 152pp; English.
XX
XX This invention relates to a novel method for determining whether an
XX individual is predisposed to type 2 diabetes and/or insulin resistance.
XX Specifically, it comprises typing the human lipin 2 (LPIN2) gene in order
XX to detect at least one of the four recognised single nucleotide
XX polymorphisms (SNPs) known to be associated with type 2 diabetes and
XX insulin resistance. The present invention further describes detecting
XX linkage disequilibrium polymorphisms that indicate a susceptibility or
XX genetic predisposition to these conditions. The method comprises
XX contacting a test agent with an LPIN2 mutated polynucleotide or

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CC polypeptide and determining whether it is capable of binding and/ or  
CC modulating the activity or expression of the molecule. Accordingly, these  
CC compositions exhibit antidiabetic activity and can be used to treat type  
CC 2 diabetes and/ or insulin resistance using gene therapy. This  
CC oligonucleotide sequence is a PCR primer used to amplify human LPIN2 DNA  
CC of the invention.

XX  
SQ Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1483 CACAACTTCCTGACACTAC 1502  
| | | | | | | | | | | | | | | | | |  
DB 20 CCCAACTTACTGATACTAC 1

RESULT 1995

ADI03750/c

ID ADI03750 standard; DNA; 20 BP.

XX

AC ADI03750;

XX 22-APR-2004 (first entry)

DT

DE Human ERMAP gene fragment amplifying primer ev2c.

XX

XX ERMAP; erythroid membrane-associated protein; Scianna antigen; Sc;

KW Radin antigen; Rd; red cell adhesion protein; human; PCR; primer; ss.

KW

XX Homo sapiens.

OS Synthetic.

OS

XX EP1378519-A1.

PN

XX 07-JAN-2004.

XX

XX 05-JUL-2002; 2002EP-00014908.

XX

XX 05-JUL-2002; 2002EP-00014908.

PR

XX (BIOT-) BIOTEST AG.

XX

XX Flegel WA, Wagner FF;

XX

XX WPI; 2004-101299/11.

DR

XX New polynucleotides encoding a human erythroid membrane-associated

PT protein (ERMAP) having at least one mutation compared to a wild type

PT ERMAP, useful for detecting Scianna antigen or determining Scianna

PT antigen type.

PT

XX

PS Disclosure; SEQ ID NO 35; 58pp; English.

XX

CC The invention relates to a polynucleotide (I) encoding human erythroid  
CC membrane-associated protein (ERMAP), its fragment or variant, carrying at  
CC least one mutation as compared to the nucleotide sequence (SEQ ID NO: 1).  
CC The mutation in (I) is a missense mutation causing an amino acid  
CC substitution in the extracellular portion of the ERMAP protein,  
CC specifically causing an amino acid substitution in position 26, 57 and/or  
CC 60 of the amino acid sequence of ERMAP. The mutation may also be a  
CC deletion causing a shift in the reading frame of the ERMAP gene, where  
CC the mutation occurs in nucleotide position 54, 76, 169, 178, 307 and/or  
CC 308. The mutation is a silent mutation in nucleotide position 54 from C  
CC to T, or a missense mutation in position 76 from C to T, a G to A in  
CC position 169, and/or a C to G in position 178. The mutation may be a  
CC deletion of nucleotide position 307 and 308 of the ERMAP gene (SEQ ID NO:  
CC 1). The polynucleotide, oligonucleotide, antibody, aptamer or phage is  
CC useful for the detection of a Scianna antigen and/or for the  
CC determination of the Scianna antigen (Sc) type. The cells from a proband,  
CC preferably red blood cells, are useful for a serologic test. The  
CC polynucleotide may also be used in the characterisation of monoclonal and

CC polyclonal antibodies for Scianna antigen determination, and for the  
CC assessment of affinity, avidity, sensitivity, specificity and/or  
CC reactivity of anti-Sc antibodies. Sequences ADI03727-ADI03763 represent  
CC PCR primers for amplifying the eleven exon fragments and parts of  
CC promoter of the human ERMAP gene.

XX  
SQ Sequence 20 BP; 1 A; 8 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1013 GGGGAGAGCTCAAGCTGGCT 1032  
| | | | | | | | | | | | | | | | | |  
DB 20 GGAGACAGCACACAGCGGCT 1

RESULT 1996

ADI14022/c

ID ADI14022 standard; DNA; 20 BP.

XX

AC ADI14022;

XX

DT 22-APR-2004 (first entry)

XX

DE Antisense DNA oligo to target human PTP1B DNA SeqID 275.

XX

KW human; ss; antisense; PTP1B; protein phosphatase 1B; PTPN1;

KW phosphothioate backbone; hyperproliferative condition; cancer;

KW cytostatic; antidiabetic; anorectic; type 2 diabetes; obesity.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "OTHER= phosphorothioate backbone"

FT modified\_base 1..5

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER= 2' methoxyethyl nucleotides. All cytidine  
nucleobases are 5' methylcytidine."

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "OTHER= 2' methoxyethyl nucleotides. All cytidine  
nucleobases are 5' methylcytidine."

US2003220282-A1.

XX

PD 27-NOV-2003.

XX

XX 07-FEB-2003; 2003US-00360510.

XX

XX 18-JAN-2000; 2000US-00487368.

PR

PR 31-JUL-2000; 2000US-00629644.

PR

PR 14-MAY-2001; 2001US-00854883.

XX

XX (ISIS-) ISIS PHARM INC.

XX

PI Bhanot S, Cowsett LM, Wyatt JR, Monia BP, Butler MM, McKay R;

PI Friar SM;

XX

DR WPI; 2004-051719/05.

XX

PT New compounds, particularly antisense oligonucleotides targeted to a  
PT nucleic acid encoding PTP1B, useful for treating a disease/condition  
PT associated with PTP1B, such as cancer, diabetes or obesity.

XX

PS Claim 3; SEQ ID NO 275; 143pp; English.

XX

CC This invention relates to novel compositions and methods for modulating  
 CC the expression of PTP1B (also known as protein phosphatase 1B and PTPN1).  
 CC Specifically, it refers to antisense compounds that can target and  
 CC hybridize with a nucleic acid molecule encoding PTP1B, as well as splice  
 CC variants thereof and inhibit expression accordingly. PTP1B is a tyrosine  
 CC phosphatase that plays an essential regulatory role in signalling  
 CC mediated by the insulin receptor and as such is useful for treating  
 CC diseases such as type 2 diabetes and obesity. Furthermore, PTP1B can  
 CC suppress transformation of oncogenic genes, such that compositions of  
 CC this invention can also be used to treat hyperproliferative conditions  
 CC including cancer. Accordingly, these compounds can be described as having  
 CC cytostatic, antidiabetic and anorectic activities. This oligonucleotide  
 CC sequence is an antisense DNA oligo that targets human PTP1B DNA, and  
 CC which has a phosphorothioate backbone and 2'-O-methoxyethyl wings, used  
 CC in an exemplification of the invention.

XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 727 GAGGGGGACCTGCACGCG 746  
 ||||| ||||| ||||| ||||| |||||  
 Db 20 GAGGTGTCACCTGCAGAGC 1

RESULT 1997  
 ADI30027/C  
 ID ADI30027 standard; DNA; 20 BP.  
 XX  
 AC ADI30027;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE Human dual specific phosphatase 4 DNA, antisense oligonucleotide #47.  
 XX  
 KW Antisense therapy; human; dual specific phosphatase 4;  
 KW hyperproliferative disorder; developmental disorder; apoptosis;  
 KW cytostatic; phosphorothioate; ss.  
 XX  
 OS Homo sapiens.

Key Location/Qualifiers  
 modified\_base 1..20  
 /tag= a  
 /mod\_base= OTHER  
 /note= "This oligonucleotide has a phosphorothioate  
 backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'  
 and 3' ends, which are 5 nucleotides in length at each  
 end. All cytidine residues are 5-methylcytidines"

US2003232441-A1.

18-DEC-2003.

17-JUN-2002; 2002US-00174460.

17-JUN-2002; 2002US-00174460.

(ISIS-) ISIS PHARM INC.

Monia BP, Bennett CF, Dobie KW;

WPI; 2004-061286/06.

New compounds, particularly antisense oligonucleotides targeted to a  
 nucleic acid encoding dual specific phosphatase 4, useful for treating  
 cancer, developmental disorder or a condition arising from aberrant  
 apoptosis.

Example 15; SEQ ID NO 60; 61pp; English.

CC The present invention relates to antisense compounds targeted to a  
 CC nucleic acid encoding dual specific phosphatase 4. The antisense compound  
 CC comprises an antisense oligonucleotide that specifically hybridises with  
 CC the nucleic acid and inhibits the expression of dual specific phosphatase  
 CC 4. The antisense oligonucleotide is a chimeric oligonucleotide. The  
 CC antisense oligonucleotide comprises at least one modified internucleoside  
 CC linkage, preferably a phosphorothioate linkage. It also comprises at  
 CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)  
 CC sugar moiety. The antisense oligonucleotide further comprises at least  
 CC one modified nucleobase, preferably a 5-methylcytosine. The antisense  
 CC oligonucleotides are useful for the treatment of diseases such as  
 CC hyperproliferative disorders, developmental disorders, and diseases  
 CC associated with aberrant apoptosis. The present sequence represents an  
 CC antisense oligonucleotide used in the examples of the present invention.

XX Sequence 20 BP; 5 A; 9 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1166 TGGGCTGCATCTTCATGAG 1185  
 ||||| ||||| ||||| ||||| |||||  
 Db 20 TGGGCTGCAGCTCCTGTGGG 1

RESULT 1998  
 ADI30069  
 ID ADI30069 standard; DNA; 20 BP.  
 XX  
 AC ADI30069;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE Human dual specific phosphatase 4 DNA target sequence #17.  
 XX  
 KW Antisense therapy; human; dual specific phosphatase 4;  
 KW hyperproliferative disorder; developmental disorder; apoptosis;  
 KW cytostatic; ds.  
 XX  
 OS Homo sapiens.

US2003232441-A1.

18-DEC-2003.

17-JUN-2002; 2002US-00174460.

17-JUN-2002; 2002US-00174460.

(ISIS-) ISIS PHARM INC.

Monia BP, Bennett CF, Dobie KW;

WPI; 2004-061286/06.

New compounds, particularly antisense oligonucleotides targeted to a  
 nucleic acid encoding dual specific phosphatase 4, useful for treating  
 cancer, developmental disorder or a condition arising from aberrant  
 apoptosis.

Example 15; SEQ ID NO 102; 61pp; English.

CC The present invention relates to antisense compounds targeted to a  
 CC nucleic acid encoding dual specific phosphatase 4. The antisense compound  
 CC comprises an antisense oligonucleotide that specifically hybridises with  
 CC the nucleic acid and inhibits the expression of dual specific phosphatase  
 CC 4. The antisense oligonucleotide is a chimeric oligonucleotide. The  
 CC antisense oligonucleotide comprises at least one modified internucleoside  
 CC linkage, preferably a phosphorothioate linkage. It also comprises at  
 CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)  
 CC sugar moiety. The antisense oligonucleotide further comprises at least  
 CC one modified nucleobase, preferably a 5-methylcytosine. The antisense

CC oligonucleotides are useful for the treatment of diseases such as  
 CC hyperproliferative disorders, developmental disorders, and diseases  
 CC associated with aberrant apoptosis. The present sequence represents a  
 CC human dual specific phosphatase 4 DNA target sequence for an antisense  
 CC oligonucleotide.  
 XX  
 SQ Sequence 20 BP; 1 A; 5 C; 9 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1166 TGGGCTGCACCTCTCTATGAG 1185  
 Db 1 TGGGCTGCACCTCTCTGTGG 20  
 RESULT 1999  
 ADJ32721/c  
 ID ADJ32721 standard; DNA; 20 BP.  
 XX  
 AC ADJ32721;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE Human GPCR 39 specific antisense oligo, ISIS 155246.  
 XX  
 KW G protein-coupled receptor; GPCR; research tool;  
 KW hyperproliferative disorder; cancer; neurological disorder; prophylaxis;  
 KW infection; inflammation; tumour; antisense gene therapy; human;  
 KW antisense; phosphorothioate backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone in which all cytidines  
 FT are 5-methyl cytidines"  
 FT modified\_base 1..5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "2'-methoxyethyl nucleotides"  
 FT modified\_base 16..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-methoxyethyl nucleotides"  
 XX  
 PN US2003232769-A1.  
 XX  
 PD 18-DEC-2003.  
 XX  
 PF 17-JUN-2002; 2002US-00173902.  
 XX  
 PR 17-JUN-2002; 2002US-00173902.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Monia BP, Dobie KW;  
 XX  
 DR WPI; 2004-061308/06.  
 XX  
 XX New antisense compound targeted to a nucleic acid molecule encoding G  
 FT protein-coupled receptor 39, useful for modulating expression of G  
 FT protein-coupled receptor 39 or treating hyperproliferative or  
 FT neurological disorder.  
 XX  
 PS Example 15; SEQ ID NO 43; 46pp; English.  
 XX  
 CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of G protein-coupled receptor (GPCR) 39.

CC The antisense oligonucleotide is useful in modulating the function of  
 CC nucleic acid molecules encoding GPCR 39. It is also used as research  
 CC tools and diagnostics and is used as tools in differential and/or  
 CC combinatorial analyses to elucidate expression patterns of a portion or  
 CC the entire complement of genes expressed within cells and tissues. The  
 CC antisense compound is used for treating diseases or conditions associated  
 CC with GPCR 39, preferably hyperproliferative disorder, e.g. cancer or a  
 CC neurological disorder. It is also used as prophylaxis, e.g. to prevent or  
 CC delay infection, inflammation or tumour formation. The antisense  
 CC oligonucleotide is useful in antisense gene therapy. The present sequence  
 CC is an antisense oligonucleotide targeted towards human GPCR 39. This  
 CC sequence is used to illustrate the method of the invention.  
 XX  
 SQ Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 926 TCCAGCTGCTCCGTGGCGCTG 945  
 Db 20 TCCAGCTACACCTGTCTCTG 1  
 RESULT 2000  
 ADJ32749  
 ID ADJ32749 standard; DNA; 20 BP.  
 XX  
 AC ADJ32749;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE Human GPCR 39 target region #24.  
 XX  
 KW G protein-coupled receptor; GPCR; research tool;  
 KW hyperproliferative disorder; cancer; neurological disorder; prophylaxis;  
 KW infection; inflammation; tumour; antisense gene therapy; human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2003232769-A1.  
 XX  
 PD 18-DEC-2003.  
 XX  
 PF 17-JUN-2002; 2002US-00173902.  
 XX  
 PR 17-JUN-2002; 2002US-00173902.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Monia BP, Dobie KW;  
 XX  
 DR WPI; 2004-061308/06.  
 XX  
 XX New antisense compound targeted to a nucleic acid molecule encoding G  
 FT protein-coupled receptor 39, useful for modulating expression of G  
 FT protein-coupled receptor 39 or treating hyperproliferative or  
 FT neurological disorder.  
 XX  
 PS Example 15; SEQ ID NO 71; 46pp; English.  
 XX  
 CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of G protein-coupled receptor (GPCR) 39.  
 CC The antisense oligonucleotide is useful in modulating the function of  
 CC nucleic acid molecules encoding GPCR 39. It is also used as research  
 CC tools and diagnostics and is used as tools in differential and/or  
 CC combinatorial analyses to elucidate expression patterns of a portion or  
 CC the entire complement of genes expressed within cells and tissues. The  
 CC antisense compound is used for treating diseases or conditions associated  
 CC with GPCR 39, preferably hyperproliferative disorder, e.g. cancer or a  
 CC neurological disorder. It is also used as prophylaxis, e.g. to prevent or  
 CC delay infection, inflammation or tumour formation. The antisense  
 CC oligonucleotide is useful in antisense gene therapy. The present sequence



347 AGATGGGCTCTGATGGGAG 366  
 1 AAATGGGATCAGATGGTGAG 20

RESULT 2003  
 ADI19169/c  
 ID ADI19169 standard; DNA; 20 BP.  
 XX  
 AC ADI19169;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #23.  
 XX  
 KW gene therapy; antisense technology; PCTAIRE protein kinase 2;  
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
 FT are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 15..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 XX  
 PN US2003225256-A1.  
 XX  
 PD 04-DEC-2003.  
 XX  
 PF 31-MAY-2002; 2002US-00160787.  
 XX  
 PR 31-MAY-2002; 2002US-00160787.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Watt AT;  
 XX  
 DR WPI; 2004-022085/02.  
 XX  
 PT New antisense oligonucleotide, having a sequence targeted to a nucleic  
 PT acid encoding PCTAIRE protein kinase 2, useful for preparing a  
 PT composition for treating neurological disorders.  
 XX  
 PS Claim 1; SEQ ID NO 36; 58pp; English.  
 XX  
 CC The invention describes a new antisense oligonucleotide, having a  
 CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE  
 CC protein kinase 2, that specifically hybridises with the nucleic acid  
 CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.  
 CC The antisense oligonucleotide is useful for preparing a composition for  
 CC treating e.g., neurological disorders. This sequence represents a human  
 CC PCTAIRE protein kinase 2 antisense oligonucleotide.  
 XX  
 SQ Sequence 20 BP; 4 A; 8 C; 1 G; 7 T; 0 U; 0 Other;  
 XX  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

347 AGATGGGCTCTGATGGGAG 366  
 20 AAATGGGATCAGATGGTGAG 1

RESULT 2005  
 ADI19242

347 AGATGGGCTCTGATGGGAG 366  
 1 AAATGGGATCAGATGGTGAG 20

RESULT 2003  
 ADI19169/c  
 ID ADI19169 standard; DNA; 20 BP.  
 XX  
 AC ADI19169;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #23.  
 XX  
 KW gene therapy; antisense technology; PCTAIRE protein kinase 2;  
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
 FT are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 15..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 XX  
 PN US2003225256-A1.  
 XX  
 PD 04-DEC-2003.  
 XX  
 PF 31-MAY-2002; 2002US-00160787.  
 XX  
 PR 31-MAY-2002; 2002US-00160787.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Watt AT;  
 XX  
 DR WPI; 2004-022085/02.  
 XX  
 PT New antisense oligonucleotide, having a sequence targeted to a nucleic  
 PT acid encoding PCTAIRE protein kinase 2, useful for preparing a  
 PT composition for treating neurological disorders.  
 XX  
 PS Claim 1; SEQ ID NO 36; 58pp; English.  
 XX  
 CC The invention describes a new antisense oligonucleotide, having a  
 CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE  
 CC protein kinase 2, that specifically hybridises with the nucleic acid  
 CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.  
 CC The antisense oligonucleotide is useful for preparing a composition for  
 CC treating e.g., neurological disorders. This sequence represents a human  
 CC PCTAIRE protein kinase 2 antisense oligonucleotide.  
 XX  
 SQ Sequence 20 BP; 4 A; 8 C; 1 G; 7 T; 0 U; 0 Other;  
 XX  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

347 AGATGGGCTCTGATGGGAG 366  
 20 AAATGGGATCAGATGGTGAG 1



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ID XX AD119242 standard; DNA; 20 BP.
AC XX AD119242;
DE XX
DT XX 22-APR-2004 (first entry)
DE XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #96.
KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX XX
OS Homo sapiens.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX XX
PN US2003225256-A1.
XX XX
PD 04-DEC-2003.
XX XX
PF 31-MAY-2002; 2002US-00160787.
XX XX
PR 31-MAY-2002; 2002US-00160787.
XX XX
PA (ISIS-) ISIS PHARM INC.
XX XX
PI Watt AT;
XX XX
DR WPI; 2004-022085/02.
XX XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX XX
PS Example 15; SEQ ID NO 109; 58pp; English.
XX XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX XX
SQ Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 388 TCCTCGGATGAGGTGCAGTC 407
DB 1 TCATCTGATGAAGTCCAGTC 20
RESULT 2006
AD119268
ID AD119268 standard; DNA; 20 BP.
XX XX
AC AD119268;
XX XX
```

```

DT XX 22-APR-2004 (first entry)
DE XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #122.
XX XX
KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX XX
OS Homo sapiens.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX XX
PN US2003225256-A1.
XX XX
PD 04-DEC-2003.
XX XX
PF 31-MAY-2002; 2002US-00160787.
XX XX
PR 31-MAY-2002; 2002US-00160787.
XX XX
PA (ISIS-) ISIS PHARM INC.
XX XX
PI Watt AT;
XX XX
DR WPI; 2004-022085/02.
XX XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX XX
PS Example 15; SEQ ID NO 135; 58pp; English.
XX XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX XX
SQ Sequence 20 BP; 8 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1517 TAAAGGAGATTGAGTCAAA 1536
DB 1 TGAAGAGATTGAGTTGCAA 20
RESULT 2007
AD119173/c
ID AD119173 standard; DNA; 20 BP.
XX XX
AC AD119173;
XX XX
DT 22-APR-2004 (first entry)
DE XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #27.
XX XX
```

KW gene therapy; antisense technology; PCTAIRE protein kinase 2;  
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.  
 XX Homo sapiens.

XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
 FT are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 15..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 XX US2003225256-A1.  
 PN 04-DEC-2003.  
 XX 31-MAY-2002; 2002US-00160787.  
 XX 31-MAY-2002; 2002US-00160787.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Watt AT;  
 XX WPI; 2004-022085/02.  
 XX New antisense oligonucleotide, having a sequence targeted to a nucleic  
 XX acid encoding PCTAIRE protein kinase 2, useful for preparing a  
 XX composition for treating neurological disorders.  
 XX Claim 1; SEQ ID NO 40; 58pp; English.  
 XX The invention describes a new antisense oligonucleotide, having a  
 XX sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE  
 XX protein kinase 2, that specifically hybridises with the nucleic acid  
 XX encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.  
 XX The antisense oligonucleotide is useful for preparing a composition for  
 XX treating e.g., neurological disorders. This sequence represents a human  
 XX PCTAIRE protein kinase 2 antisense oligonucleotide.  
 XX Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGTC 407  
 |||||  
 Db 20 TCATCTGATGAGTCCAGTC 1

RESULT 2008  
 ADI19212/c  
 ID ADI19212 standard; DNA; 20 BP.  
 XX AC ADI19212;  
 XX 22-APR-2004 (first entry)  
 XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #66.  
 XX gene therapy; antisense technology; PCTAIRE protein kinase 2;  
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.  
 XX Homo sapiens.

XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
 FT are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 15..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 XX US2003225256-A1.  
 PN 04-DEC-2003.  
 XX 31-MAY-2002; 2002US-00160787.  
 XX 31-MAY-2002; 2002US-00160787.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Watt AT;  
 XX WPI; 2004-022085/02.  
 XX New antisense oligonucleotide, having a sequence targeted to a nucleic  
 XX acid encoding PCTAIRE protein kinase 2, useful for preparing a  
 XX composition for treating neurological disorders.  
 XX Claim 1; SEQ ID NO 79; 58pp; English.  
 XX The invention describes a new antisense oligonucleotide, having a  
 XX sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE  
 XX protein kinase 2, that specifically hybridises with the nucleic acid  
 XX encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.  
 XX The antisense oligonucleotide is useful for preparing a composition for  
 XX treating e.g., neurological disorders. This sequence represents a human  
 XX PCTAIRE protein kinase 2 antisense oligonucleotide.  
 XX Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1517 TAAAGGAGATTCAGTACAA 1536  
 |||||  
 Db 20 TGAAGAGATTCAGTTGCAA 1

RESULT 2009  
 ADI19256  
 ID ADI19256 standard; DNA; 20 BP.  
 XX AC ADI19256;  
 XX 22-APR-2004 (first entry)  
 XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #110.  
 XX gene therapy; antisense technology; PCTAIRE protein kinase 2;  
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.  
 XX Homo sapiens.  
 XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= b



```

FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN      US2003225256-A1.
PD      04-DEC-2003.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Matt AT;
XX
XX      WPI; 2004-022085/02.
XX
XX      New antisense oligonucleotide, having a sequence targeted to a nucleic
PT      acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT      composition for treating neurological disorders.
XX
XX      Example 15; SEQ ID NO 53; 58pp; English.
XX
XX      The invention describes a new antisense oligonucleotide, having a
CC      sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC      protein kinase 2, that specifically hybridises with the nucleic acid
CC      encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC      The antisense oligonucleotide is useful for preparing a composition for
CC      treating e.g., neurological disorders. This sequence represents a human
CC      PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
XX      Sequence 20 BP; 4 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
SQ
Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1390 CTCACCAAGCTGTTCAGTT 1409
DB      1 CTCCTCAAGCTTTTCCAATT 20

RESULT 2012
ADI19197/c
ID      ADI19197 standard; DNA; 20 BP.
XX
XX      ADI19197;
XX
XX      22-APR-2004 (first entry)
XX
XX      Human PCTAIRE protein kinase 2 antisense oligonucleotide #51.
DE
XX      gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW      neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
XX      Homo sapiens.
XX
XX      Key      Location/Qualifiers
FH      modified_base 1..20
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "OTHER= Phosphorothioate backbone. All cytidines
FT      are 5-methylcytidines"
FT      modified_base 1..5
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT      modified_base 15..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX      US2003225256-A1.
XX
XX      04-DEC-2003.
XX

```

```

PN      US2003225256-A1.
XX
XX      04-DEC-2003.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Matt AT;
XX
XX      WPI; 2004-022085/02.
XX
XX      New antisense oligonucleotide, having a sequence targeted to a nucleic
PT      acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT      composition for treating neurological disorders.
XX
XX      Example 15; SEQ ID NO 64; 58pp; English.
XX
XX      The invention describes a new antisense oligonucleotide, having a
CC      sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC      protein kinase 2, that specifically hybridises with the nucleic acid
CC      encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC      The antisense oligonucleotide is useful for preparing a composition for
CC      treating e.g., neurological disorders. This sequence represents a human
CC      PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
XX      Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
SQ
Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1134 GGACTACTCCATCAGATTG 1153
DB      20 GGAGTACTTAAACACAGATTG 1

RESULT 2013
ADI19263
ID      ADI19263 standard; DNA; 20 BP.
XX
XX      ADI19263;
XX
XX      22-APR-2004 (first entry)
XX
XX      Human PCTAIRE protein kinase 2 antisense oligonucleotide #117.
DE
XX      gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW      neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
XX      Homo sapiens.
XX
XX      Key      Location/Qualifiers
FH      modified_base 1..20
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "OTHER= Phosphorothioate backbone. All cytidines
FT      are 5-methylcytidines"
FT      modified_base 1..5
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT      modified_base 15..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX      US2003225256-A1.
XX
XX      04-DEC-2003.
XX

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```
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX
PS Example 15; SEQ ID NO 130; 58pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 7 A; 6 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1306 TTCAGACATACAACTACCC 1325
DB 1 TTCAAGAACTACAACTTTCC 20

RESULT 2014
AD119203/c
ID AD119203 standard; DNA; 20 BP.
XX
AC AD119203;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #57.
XX
KW Gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
PI Watt AT;
XX
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PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX
PS Claim 1; SEQ ID NO 70; 58pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 6 A; 1 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1306 TTCAGACATACAACTACCC 1325
DB 20 TTCAAGAACTACAACTTTCC 1

RESULT 2015
AD119250
ID AD119250 standard; DNA; 20 BP.
XX
AC AD119250;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #104.
XX
KW Gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
PI Watt AT;
XX
```

DR WPI; 2004-022085/02.  
XX  
PT New antisense oligonucleotide, having a sequence targeted to a nucleic  
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a  
PT composition for treating neurological disorders.  
XX  
XX Example 15; SEQ ID NO 117; 58pp; English.  
PS  
CC The invention describes a new antisense oligonucleotide, having a  
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE  
CC protein kinase 2, that specifically hybridises with the nucleic acid  
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.  
CC The antisense oligonucleotide is useful for preparing a composition for  
CC treating e.g., neurological disorders. This sequence represents a human  
CC PCTAIRE protein kinase 2 antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 692 TTGTGGCACTCAAGGAGATC 711  
DB 1 TGGTGGCATTAAAGAGATC 20  
RESULT 2016  
ADJ32620  
ID ADJ32620 standard; DNA; 20 BP.  
XX  
AC ADJ32620;  
XX  
XX 22-APR-2004 (first entry)  
DT Human ERK-6 specific antisense oligo, ISIS 157013.  
DE Extracellular-signal-regulated kinase-6; ERK-6;  
DE hyperproliferative disorder; cancer; inflammatory disorder;  
DE neurodegenerative disorder; Alzheimer's disease; angiogenesis;  
DE tubular formation; matrix degradation; human; antisense;  
DE phosphorothioate backbone; therapy; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone in which all cytidines  
FT are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl residues"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl residues"  
XX  
XX US2003232778-A1.  
XX  
XX 18-DEC-2003.  
XX  
XX 17-JAN-2003; 2003US-00348431.  
XX  
XX 17-JUN-2002; 2002US-00174465.  
XX  
XX (MARC/) MARCUSOON E G.  
XX (BENN/) BENNETT C F.  
XX (DOBI/) DOBIE K W.  
XX

PI Marcusson EG, Bennett CF, Dobie KW;  
XX WPI; 2004-061312/06.  
XX  
XX New compound targeted to a nucleic acid molecule encoding extracellular-  
PT signal-regulated kinase-6, useful for treating angiogenic,  
PT hyperproliferative (cancer), inflammatory or neurodegenerative disorders  
PT (Alzheimer's disease).  
XX  
XX Example 15; SEQ ID NO 13; 47pp; English.  
PS  
XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of extracellular-signal-regulated kinase-6  
CC (ERK-6). The compound is useful in treating an animal having a disease or  
CC condition associated with ERK-6, e.g. a hyperproliferative disorder  
CC (especially cancer), an inflammatory disorder or a neurodegenerative  
CC disorder (especially Alzheimer's disease). It is also useful for  
CC inhibiting angiogenesis, for preventing tubular formation of blood  
CC vessels, and for preventing degradation of extracellular matrix for new  
CC blood vessel formation. The present sequence is an antisense  
CC oligonucleotide targetted towards human ERK-6 DNA. This sequence is used  
CC to illustrate the method of the invention.  
XX  
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 83 CCCGGGCTCTGAGTTGCT 102  
DB 1 CCACGAGCTCTGAGTTTCT 20  
RESULT 2017  
ADJ32656/c  
ID ADJ32656 standard; DNA; 20 BP.  
XX  
XX ADJ32656;  
XX  
XX 22-APR-2004 (first entry)  
DT Human ERK-6 target DNA fragment #2.  
DE  
XX  
XX Extracellular-signal-regulated kinase-6; ERK-6;  
XX hyperproliferative disorder; cancer; inflammatory disorder;  
XX neurodegenerative disorder; Alzheimer's disease; angiogenesis;  
XX tubular formation; matrix degradation; human; therapy; ds.  
XX Homo sapiens.  
OS  
XX US2003232778-A1.  
XX  
XX 18-DEC-2003.  
XX  
XX 17-JAN-2003; 2003US-00348431.  
XX  
XX 17-JUN-2002; 2002US-00174465.  
XX  
XX (MARC/) MARCUSOON E G.  
XX (BENN/) BENNETT C F.  
XX (DOBI/) DOBIE K W.  
XX  
XX Marcusson EG, Bennett CF, Dobie KW;  
XX WPI; 2004-061312/06.  
XX  
XX New compound targeted to a nucleic acid molecule encoding extracellular-  
PT signal-regulated kinase-6, useful for treating angiogenic,  
PT hyperproliferative (cancer), inflammatory or neurodegenerative disorders  
PT (Alzheimer's disease).  
XX  
XX Example 15; SEQ ID NO 49; 47pp; English.  
PS

XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of extracellular-signal-regulated kinase-6  
CC (ERK-6). The compound is useful in treating an animal having a disease or  
CC condition associated with ERK-6, e.g. a hyperproliferative disorder  
CC (especially cancer), an inflammatory disorder or a neurodegenerative  
CC disorder (especially Alzheimer's disease). It is also useful for  
CC inhibiting angiogenesis, for preventing tubular formation of blood  
CC vessels, and for preventing degradation of extracellular matrix for new  
CC blood vessel formation. The present sequence is human ERK-6 target DNA  
CC fragment. This sequence is used to illustrate the method of the  
CC invention.  
XX  
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 83 CCCGGGCTCTGAGTTGCT 102  
DB 20 CCACGAGCTCTGAGTTTCT 1

RESULT 2018  
ADH80324  
ID ADH80324 standard; DNA; 20 BP.  
XX  
AC ADH80324;  
XX  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE MAC2-BP PCR primer, SEQ ID 48.  
XX  
KW Cytostatic; human; senescence; tumour; PCR; primer; ss; MAC2-BP.  
XX  
OS Homo sapiens.  
XX  
PN WO2004005462-A2.  
XX  
XX  
PD 15-JAN-2004.  
XX  
XX 27-JUN-2003; 2003WO-US020425.  
XX  
PR 03-JUL-2002; 2002US-0394121P.  
XX  
PA (UNII ) UNIV ILLINOIS FOUND.  
XX  
PI Roninson IB, Chang B;  
XX  
DR WPI; 2004-091347/09.  
XX

Identifying compounds that induce senescence in mammalian cells, useful  
PT for treating e.g. cancer, comprises assaying the expression of cellular  
PT genes in the cell in the presence and absence of the compound.  
XX  
PS Example 4; SEQ ID NO 48; 102pp; English.  
XX

The present invention relates to a method for identifying a compound that  
CC induces senescence in a mammalian cell. The method comprises assaying the  
CC expression of cellular genes in the cell in the presence and absence of  
CC the compound. The method is useful for identifying and modulating  
CC expression of tumour senescence genes. These may be used in treating  
CC diseases or conditions related to abnormal cell proliferation or  
CC neoplastic cell growth, in assessing the efficacy of the treatment of the  
CC disease or condition, or in identifying compounds that induce senescence  
CC in mammalian cells or that inhibit senescence-associated induction of  
CC cellular gene expression. PCR primers ADH80277-ADH80400 were used to  
CC amplify genes that are up- or downregulated in doxorubicin-induced  
CC accelerated senescence to identify senescence-inducing compounds.  
XX  
SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 48 ACCAGCAGTGTGAGTCTGA 67  
DB 1 ACCATGAGTGTGGATGCTGA 20

RESULT 2019  
ADK96009/c  
ID ADK96009 standard; DNA; 20 BP.  
XX  
AC ADK96009;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Primer of the invention #1729.  
XX  
KW human; single nucleotide polymorphism; SNP; ss; primer.  
XX  
OS Synthetic.  
XX  
PN JP2003259875-A.  
XX  
PD 16-SEP-2003.  
XX  
PF 08-MAR-2002; 2002JP-00064373.  
XX  
PR 08-MAR-2002; 2002JP-00064373.  
XX  
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
XX  
DR WPI; 2004-093977/10.  
XX

Novel polynucleotide useful for PCR amplification along with two DNA  
PT fragment from another set of sequences, or for detecting single  
PT nucleotide polymorphism in human gene.  
XX  
PS Claim 2; SEQ ID NO 5038; 2627pp; Japanese.  
XX

The present invention relates to a polynucleotide isolated from a human  
CC gene and is useful for detecting a single nucleotide polymorphism in a  
CC human gene or for diagnosing of disease. The invention enables the  
CC detection of a single nucleotide polymorphism in a human gene. The  
CC present sequence represents a primer of the invention.  
XX  
SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 213 GATAGGCTGGATGAGAGTG 232  
DB 20 GAGTGGCTGGATGACAATG 1

RESULT 2020  
ADK95547  
ID ADK95547 standard; DNA; 20 BP.  
XX  
AC ADK95547;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Primer of the invention #1267.  
XX  
KW human; single nucleotide polymorphism; SNP; ss; primer.  
XX  
OS Synthetic.  
XX  
PN JP2003259875-A.

XX PD 16-SEP-2003.  
XX PF 08-MAR-2002; 2002JP-00064373.  
XX PR 08-MAR-2002; 2002JP-00064373.  
XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
XX WP; 2004-093977/10.  
XX Novel polynucleotide useful for PCR amplification along with two DNA  
PT fragment from another set of sequences, or for detecting single  
PT nucleotide polymorphism in human gene.  
XX Claim 2; SEQ ID NO 4576; 2627pp; Japanese.  
XX The present invention relates to a polynucleotide isolated from a human  
CC gene and is useful for detecting a single nucleotide polymorphism in a  
CC human gene or for diagnosing of disease. The invention enables the  
CC detection of a single nucleotide polymorphism in a human gene. The  
CC present sequence represents a primer of the invention.  
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 948 CTACTGCCACCGCAGAGG 967  
DB 1 CTGCTGCCACCTGCAGTAG 20  
RESULT 2021  
ADK96655  
ID ADK96655 standard; DNA; 20 BP.  
XX AC ADK96655;  
XX DT 06-MAY-2004 (first entry)  
XX DE Primer of the invention #2375.  
XX KW human; single nucleotide polymorphism; SNP; ss; primer.  
XX OS Synthetic.  
XX PN JP2003259875-A.  
XX PD 16-SEP-2003.  
XX PF 08-MAR-2002; 2002JP-00064373.  
XX PR 08-MAR-2002; 2002JP-00064373.  
XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
XX WP; 2004-093977/10.  
XX Novel polynucleotide useful for PCR amplification along with two DNA  
PT fragment from another set of sequences, or for detecting single  
PT nucleotide polymorphism in human gene.  
XX Claim 2; SEQ ID NO 5684; 2627pp; Japanese.  
XX The present invention relates to a polynucleotide isolated from a human  
CC gene and is useful for detecting a single nucleotide polymorphism in a  
CC human gene or for diagnosing of disease. The invention enables the  
CC detection of a single nucleotide polymorphism in a human gene. The  
CC present sequence represents a primer of the invention.  
XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 989 CCCAGAACCTGCTCATCAAC 1008  
DB 1 CTCAGAGCCTGCTCTTCAGC 20  
RESULT 2022  
ADK95801  
ID ADK95801 standard; DNA; 20 BP.  
XX AC ADK95801;  
XX DT 06-MAY-2004 (first entry)  
XX DE Primer of the invention #1521.  
XX KW human; single nucleotide polymorphism; SNP; ss; primer.  
XX OS Synthetic.  
XX PN JP2003259875-A.  
XX PD 16-SEP-2003.  
XX PF 08-MAR-2002; 2002JP-00064373.  
XX PR 08-MAR-2002; 2002JP-00064373.  
XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
XX WP; 2004-093977/10.  
XX Novel polynucleotide useful for PCR amplification along with two DNA  
PT fragment from another set of sequences, or for detecting single  
PT nucleotide polymorphism in human gene.  
XX Claim 2; SEQ ID NO 4830; 2627pp; Japanese.  
XX The present invention relates to a polynucleotide isolated from a human  
CC gene and is useful for detecting a single nucleotide polymorphism in a  
CC human gene or for diagnosing of disease. The invention enables the  
CC detection of a single nucleotide polymorphism in a human gene. The  
CC present sequence represents a primer of the invention.  
XX Sequence 20 BP; 0 A; 12 C; 0 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1698 TTACTCTCTGCTTACCTGCC 1717  
DB 1 TTCTCTCTTCTCCCTCCC 20  
RESULT 2023  
ADJ61350  
ID ADJ61350 standard; DNA; 20 BP.  
XX AC ADJ61350;  
XX DT 06-MAY-2004 (first entry)  
XX DE Oligonucleotide associated to IL5R-X61176 #42.  
XX KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;  
KW airway inflammation; allergy; asthma; impeded respiration;  
KW cystic fibrosis; acute respiratory distress syndrome;  
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;  
KW



```
KW ss.
OS Homo sapiens.
XX WO2004011613-A2.
PN
PD 05-FEB-2004.
XX
PF 25-JUL-2003; 2003WO-US023509.
XX
PR 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIC-) EPICENESIS PHARM INC.
XX
XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
PI
XX WPI; 2004-203534/19.
DR
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCRI, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 2206; 85pp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
XX Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1444 ATGAACATCCATTCTTCTCT 1463
Db 1 ATGCAAAATGCTTCTTCTCT 20
RESULT 2024
ADJ45364
ID ADJ45364 standard; DNA; 20 BP.
XX
AC ADJ45364;
XX
DT 06-MAY-2004 (first entry)
XX
DE Hepatoma-derived growth factor antisense oligo seqid 134.
XX
KW cytostatic; endocrine; hepatoma-derived growth factor inhibitor;
KW hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
KW human; ss; antisense oligonucleotide.
XX
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
```

```
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004023379-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210429.
XX
XX 31-JUL-2002; 2002US-00210429.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dobie KW;
PI
XX WPI; 2004-142660/14.
XX
XX New compound, particularly an antisense oligonucleotide targeted to a
PT nucleic acid encoding a hepatoma-derived growth factor, useful for
PT treating a hyperproliferative disorder e.g. cancer, or a metabolic
PT disorder.
XX
XX Example 15; SEQ ID NO 134; 61pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridises with a nucleic acid molecule
CC encoding hepatoma-derived growth factor, and inhibits the expression of
CC hepatoma-derived growth factor. The compound, composition and methods are
CC useful for treating a disease or condition associated with hepatoma-
CC derived growth factor, such as a metabolic disorder, or a
CC hyperproliferative disorder, e.g. cancer, which is selected from
CC hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
CC useful in research and diagnostics for modulating the expression of
CC hepatoma-derived growth factor. This sequence represents a human hepatoma
CC -derived growth factor antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1081 AATGAGGTGTCACACTGTG 1100
Db 1 AATGAGTTGAGGCCACTGTG 20
RESULT 2025
ADJ45293/C
ID ADJ45293 standard; DNA; 20 BP.
XX
AC ADJ45293;
XX
DT 06-MAY-2004 (first entry)
XX
DE Hepatoma-derived growth factor antisense oligo seqid 63.
XX
KW cytostatic; endocrine; hepatoma-derived growth factor inhibitor;
KW hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
KW human; ss; antisense oligonucleotide.
XX
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH Key Location/Qualifiers
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FT modified_base 1. .20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT modified_base 1. .5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15. .20
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FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004023379-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210429.
XX
XX 31-JUL-2002; 2002US-00210429.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dobie KW;
XX
XX WPI; 2004-142660/14.
XX
XX New compound, particularly an antisense oligonucleotide targeted to a
XX nucleic acid encoding a hepatoma-derived growth factor, useful for
XX treating a hyperproliferative disorder e.g. cancer, or a metabolic
XX disorder.
XX
XX Example 15; SEQ ID NO 63; 61pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding hepatoma-derived growth factor, and inhibits the expression of
XX hepatoma-derived growth factor. The compound, composition and methods are
XX useful for treating a disease or condition associated with hepatoma-
XX derived growth factor, such as a metabolic disorder, or a
XX hyperproliferative disorder, e.g. cancer, which is selected from
XX hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
XX useful in research and diagnostics for modulating the expression of
XX hepatoma-derived growth factor. This sequence represents a human hepatoma
XX -derived growth factor antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1081 AATGAGGTGGTGCACCTGTG 1100
Db 20 AATGAGTTGAGCCACTGTG 1

RESULT 2026
ADJ38711/C
ID ADJ38711 standard; DNA; 20 BP.
XX
XX ADJ38711;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human resistin antisense oligonucleotide seq id 100.
XX
XX antidiabetic; anorectic; cardiant; antiarteriosclerotic;
XX resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
XX atherosclerosis; antisense technology; human; antisense oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
```

```
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 1. .20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT modified_base 1. .5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15. .20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004023383-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bhanot S, Freier SM;
XX
XX WPI; 2004-142664/14.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding resistin, useful for treating a metabolic disorder,
XX e.g. diabetes or obesity, or atherosclerosis.
XX
XX Example 15; SEQ ID NO 100; 75pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding resistin, and inhibits the expression of resistin. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with resistin, such as a metabolic disease, e.g. diabetes or
XX obesity, or atherosclerosis. They are also useful in research and
XX diagnostics for modulating the expression of resistin. This sequence
XX represents a human resistin antisense oligonucleotide.
XX
XX Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 14 AAGATGGACAGGAATGCAG 33
Db 20 AAGATAGACTGGACAGCAG 1

RESULT 2027
ADJ38770
ID ADJ38770 standard; DNA; 20 BP.
XX
XX ADJ38770;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human resistin antisense oligonucleotide seq id 159.
XX
XX antidiabetic; anorectic; cardiant; antiarteriosclerotic;
XX resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
XX atherosclerosis; antisense technology; human; antisense oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
```

```

XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
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XX PN US2004023393-A1.
XX
XX PD 05-FEB-2004.
XX
XX PF 31-JUL-2002; 2002US-00210833.
XX
XX PR 31-JUL-2002; 2002US-00210833.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Bhanot S, Freier SM;
XX
XX WPI; 2004-142664/14.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding resistin, useful for treating a metabolic disorder,
XX e.g. diabetes or obesity, or atherosclerosis.
XX
XX Example 15; SEQ ID NO 159; 75pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding resistin, and inhibits the expression of resistin. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with resistin, such as a metabolic disease, e.g. diabetes or
XX obesity, or atherosclerosis. They are also useful in research and
XX diagnostics for modulating the expression of resistin. This sequence
XX represents a human resistin antisense oligonucleotide.
XX
XX Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 14 AAGGATGGACAGGATGCAG 33
XX
XX Db 1 AAGGATGACTGGACAGCAG 20
XX
XX RESULT 2028
XX ADJ62144
XX ID ADJ62144 standard; DNA; 20 BP.
XX
XX AC ADJ62144;
XX
XX DT 06-MAY-2004 (first entry)
XX
XX DE Human EDG1 antisense oligonucleotide ISIS126603.
XX
XX Human; ss; antisense gene therapy; endothelial differentiation gene 1;
XX EDG1; G protein-coupled receptor; development; wound healing;
XX tissue regeneration; cellular proliferation; apoptosis; cancer;
XX angiogenesis; inflammation; hyperproliferative disorder;
XX developmental disorder.
XX
XX Homo sapiens.

```

```

XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "All linkages are phosphorothioate linkages and
XX all cytidines are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl residue"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl residue"
XX
XX PN US2004029273-A1.
XX
XX PD 12-FEB-2004.
XX
XX PF 09-AUG-2002; 2002US-00215448.
XX
XX PR 09-AUG-2002; 2002US-00215448.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Wyatt J;
XX
XX WPI; 2004-179673/17.
XX
XX New antisense oligonucleotide targeted to nucleic acid encoding
XX endothelial differentiation sphingolipid G-protein-coupled receptor 1,
XX for treating cancer, developmental disorder or a condition arising from
XX aberrant apoptosis.
XX
XX Claim 1; SEQ ID NO 70; 50pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding endothelial differentiation gene 1 (EDG1, a G protein coupled
XX receptor, involved in development, wound healing, tissue regeneration,
XX cellular proliferation, apoptosis, cancer, angiogenesis and
XX inflammation), and inhibits the expression of EDG1, i.e. is an antisense
XX (AS) oligonucleotide. Also included are a composition comprising the
XX compound and a carrier or diluent and a method for screening an antisense
XX compound (by contacting a preferred target region of a nucleic acid
XX molecule encoding EDG1 with one or more candidate antisense compounds
XX comprising at least an 8-nucleobase portion that is complementary to the
XX preferred target region and selecting for one or more candidate antisense
XX compounds that inhibit the expression of a nucleic acid encoding EDG1).
XX The compound, composition and methods are useful for treating a disease
XX or condition associated with EDG1, such as a hyperproliferative disorder,
XX developmental disorder or a disease or condition arising from aberrant
XX apoptosis. They are also useful in research and diagnostics for
XX modulating the expression of EDG1. Experimental protocols are described
XX but no results are given. The present sequence is an AS oligonucleotide
XX targeting human EDG1.
XX
XX Sequence 20 BP; 5 A; 9 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1720 AGCCATGTTTCACCTGCCAC 1739
XX
XX Db 1 AACCATCTTCATCTCCAC 20
XX
XX RESULT 2029
XX ADJ62176/c
XX ID ADJ62176 standard; cDNA; 20 BP.
XX

```

AC ADJ62176;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Human EDG1 antisense target sequence ISIS35058.  
XX  
KW Human; ss; antisense gene therapy; endothelial differentiation gene 1;  
KW EDG1; G protein-coupled receptor; development; wound healing;  
KW tissue regeneration; cellular proliferation; apoptosis; cancer;  
KW angiogenesis; inflammation; hyperproliferative disorder;  
KW developmental disorder.  
XX  
OS Homo sapiens.  
XX  
PN US2004029273-A1.  
XX  
PD 12-FEB-2004.  
XX  
PF 09-AUG-2002; 2002US-00215448.  
XX  
PR 09-AUG-2002; 2002US-00215448.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Wyatt J;  
XX  
XX WPI; 2004-179673/17.  
XX  
XX New antisense oligonucleotide targeted to nucleic acid encoding  
PT endothelial differentiation sphingolipid G-protein-coupled receptor 1,  
PT for treating cancer, developmental disorder or a condition arising from  
PT aberrant apoptosis.  
XX  
XX Example 15; SEQ ID NO 102; 50pp; English.  
XX  
XX The invention relates to a compound 8-80 nucleobases in length targeted  
CC to, and which specifically hybridizes with a nucleic acid molecule  
CC encoding endothelial differentiation gene 1 (EDG1), a G protein coupled  
CC receptor, involved in development, wound healing, tissue regeneration,  
CC cellular proliferation, apoptosis, cancer, angiogenesis and  
CC (AS) oligonucleotide. Also included are a composition comprising the  
CC compound and a carrier or diluent and a method for screening an antisense  
CC compound (by contacting a preferred target region of a nucleic acid  
CC molecule encoding EDG1 with one or more candidate antisense compounds  
CC comprising at least an 8-nucleobase portion that is complementary to the  
CC preferred target region and selecting for one or more candidate antisense  
CC compounds that inhibit the expression of a nucleic acid encoding EDG1).  
CC The compound, composition and methods are useful for treating a disease  
CC or condition associated with EDG1, such as a hyperproliferative disorder,  
CC developmental disorder or a disease or condition arising from aberrant  
CC apoptosis. They are also useful in research and diagnostics for  
CC modulating the expression of EDG1. Experimental protocols are described  
CC but no results are given. The present sequence is a target region of the  
CC human cDNA for EDG1.  
XX  
SQ Sequence 20 BP; 6 A; 0 C; 9 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1720 AGCATGTTCCACCTGCCAC 1739  
Db 20 AACCATCTTCATCTTCCAC 1  
  
RESULT 2030  
ADJ15834/C  
ID ADJ15834 standard; DNA; 20 BP.  
XX  
AC ADJ15834;  
XX

DT 20-MAY-2004 (first entry)  
XX  
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 384.  
XX  
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;  
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;  
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;  
KW gall stone; triglyceridaemia; obesity; hepatitis;  
KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;  
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;  
KW antiinflammatory; virucidal.  
XX  
OS Homo sapiens.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20 /\*tag= b  
FT /mod\_base= OTHER  
FT /label= OTHER= phosphorothioate backbone  
FT modified\_base 1..5 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
FT cytidine nucleobases are 5-methylcytidine."  
FT modified\_base 16..20 /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
FT cytidine nucleobases are 5-methylcytidine."  
XX  
PN WO2004003201-A2.  
XX  
PD 08-JAN-2004.  
XX  
XX 01-JUL-2003; 2003WO-US020865.  
XX  
PR 01-JUL-2002; 2002US-0392813P.  
XX  
PA (PHAA ) PHARMACIA CORP.  
XX  
PI Kane CD;  
XX  
DR WPI; 2004-083058/08.  
XX  
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver  
PT related homologue-1 (LRH1), useful for treating breast cancer,  
PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.  
XX  
PS Example 15; SEQ ID NO 384; 909pp; English.  
XX  
CC This invention relates to novel antisense compounds useful for modulating  
CC the expression of liver related homologue-1 (LRH1) and splice variants  
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in  
CC length that target a portion of an active site on the nucleic acid  
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan  
CC nuclear receptor protein that functions as a tissue specific  
CC transcription factor. The present invention describes antisense  
CC oligonucleotides that comprise at least one modified internucleoside  
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,  
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-  
CC methylcytidine. These antisense compounds are useful for treating or  
CC diagnosing a disease associated with LRH1, such as breast cancer,  
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high  
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,  
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic  
CC hepatitis, as well as hepatocellular carcinoma or a condition associated  
CC with aromatase activity. Accordingly, these compositions exhibit  
CC cytostatic, antilipaeamic, antiarteriosclerotic, anorectic, hepatotropic,  
CC litholytic, antiinflammatory and virucidal activities. This  
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the  
CC expression of the human LRH1 protein of the invention.  
XX

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SQ Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;
  Query Match      0.8%; Score 13.6; DB 1; Length 20;
  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1430 CCGCAGAGGATCCCATGAAA 1449
Db 20 CCCGAGAGGATCCCATATTA 1

RESULT 2031
ADJ17546
ID ADJ17546 standard; DNA; 20 BP.
AC ADJ17546;
XX
DT 20-MAY-2004 (first entry)
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 2096.
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5 /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20 /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
PN WO2004003201-A2.
XX
PD 08-JAN-2004.
XX
PF 01-JUL-2003; 2003WO-US020865.
XX
PR 01-JUL-2002; 2002US-0392813P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Kane CD;
XX
DR WPI; 2004-083058/08.
XX
PT New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT related homologue-1 (LRH1), useful for treating breast cancer,
PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS Example 15; SEQ ID NO 2096; 909pp; English.
XX
CC This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan

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CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer.
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit
CC cytostatic, antilipaeamic, antiarteriosclerotic, anorectic, hepatotropic,
CC litholytic, antiinflammatory and virucidal activities. This
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX
SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
  Query Match      0.8%; Score 13.6; DB 1; Length 20;
  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1505 CCATATTTGCACCTAAAGGAG 1524
Db 1 CCATATTTGTTCTACAGCAG 20

RESULT 2032
ADJ17107
ID ADJ17107 standard; DNA; 20 BP.
AC ADJ17107;
XX
DT 20-MAY-2004 (first entry)
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 1657.
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5 /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20 /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
PN WO2004003201-A2.
XX
PD 08-JAN-2004.
XX
PF 01-JUL-2003; 2003WO-US020865.
XX
PR 01-JUL-2002; 2002US-0392813P.
XX

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PA (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 1657; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage, at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 6 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1506 CATATTGTCACATAAGGAGA 1525
Db 1 CATATTGTCACAGCAGA 20
XX
RESULT 2033
ADJ16943
ID ADJ16943 standard; DNA; 20 BP.
XX
XX ADJ16943;
XX
XX 20-MAY-2004 (first entry)
XX
XX Antisense DNA oligo used to modulate human LRH1 expression SeqID 1493.
XX
XX human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
XX phosphorothioate; 2' MOE; breast cancer; dyslipidemia; atherosclerosis;
XX low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
XX gall stone; triglyceridaemia; obesity; hepatitis;
XX hepatocellular carcinoma; aromatase; cytostatic; antilipemic;
XX antiarteriosclerotic; anorectic; hepatotropic; litholytic;
XX antiinflammatory; virucidal.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /label= OTHER= phosphorothioate backbone
XX modified_base 1..5
XX /tag= a

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FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
XX WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX Kane CD;
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 1493; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage, at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1502 CTTCCATATTGTCACATAAG 1521
Db 1 CTTCCATATTGTCACAG 20
XX
RESULT 2034
ADL27678
ID ADL27678 standard; DNA; 20 BP.
XX
XX ADL27678;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human FasL cDNA, antisense oligonucleotide #14.
XX Antisense therapy; human; Fas; Fas ligand; FasL; Apo-1L; CD95L;

```

KW Fas associated protein 1; Fas-1; signal transduction; autoimmune disease; inflammatory disease; cancer; immunosuppressive; antiinflammatory;  
KW cytosolic; phosphorothioate; ss.  
XX

OS Homo sapiens.

XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER

FT /note= "This oligonucleotide has a phosphorothioate  
backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',  
FT back and 3' ends, which are 5 nucleotides in length at each  
FT end. All cytidine residues are 5-methylcytidines"  
XX

PN US6653133-B1.

XX 25-NOV-2003.

XX 18-SEP-2000; 2000US-00665615.

XX 12-APR-1999; 99US-00290640.

XX (ISIS-) ISIS PHARM INC.

XX Dean NM, Marcusson EG, Wyatt J;

XX WPI; 2004-050524/05.

XX New antisense oligonucleotides of 20-50 nucleobases, useful for treating  
PT autoimmune or inflammatory diseases, and cancer.  
XX

PS Example 3; SEQ ID NO 39; 76pp; English.

XX The present invention relates to antisense compounds targeted to nucleic  
CC acids encoding human Fas (also known as Apo-1 or CD95), Fas ligand (FasL,  
CC also Apo-1L and CD95L), and Fas associated protein 1 (Fap-1). The  
CC antisense compound comprises an antisense oligonucleotide that  
CC specifically hybridises with one of the said nucleic acids and inhibits  
CC Fas, FasL or Fap-1 mediated signal transduction. The antisense  
CC oligonucleotide is a chimeric oligonucleotide. The antisense  
CC oligonucleotide comprises at least one modified internucleoside linkage,  
CC preferably a phosphorothioate linkage. It also comprises at least one  
CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar  
CC moiety. The antisense oligonucleotide further comprises at least one  
CC modified nucleobase, preferably a 5-methylcytosine. The antisense  
CC oligonucleotides are useful for the treatment of autoimmune or  
CC inflammatory diseases, and cancers associated with overexpression of or  
CC constitutive activation of Fas, FasL, or Fap-1. The present sequence  
CC represents an antisense oligonucleotide used in the examples of the  
CC present invention.

XX Sequence 20 BP; 3 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1659 CACCCCTCACGGGAGGCC 1678  
Dd 1 CCCTCTTCATGGGAGGCC 20  
|||||

RESULT 2035  
ADJ24114/c  
ID ADJ24114 standard; DNA; 20 BP.

AC ADJ24114;

XX 20-MAY-2004 (first entry)

DE Human endothelial lipase antisense oligonucleotide, SEQ ID 2512.

XX

KW Antilipemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;  
KW Human; Endothelial lipase; dyslipidaemia; high density lipoprotein; HDL;  
KW cardiovascular disorder; metabolic syndrome X; ss.  
XX

OS Homo sapiens.

XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER

FT /note= "This oligonucleotide has a phosphorothioate  
backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',  
FT back and 3' ends, which are 4 nucleotides in length. Also all  
FT cytidine residues are 5-methylcytidines"  
XX

PN WO2004009541-A2.

XX 29-JAN-2004.

XX 18-JUL-2003; 2003WO-US022410.

XX 19-JUL-2002; 2002US-0397106P.

XX (PHAA ) PHARMACIA CORP.

XX Bhat BG;

XX WPI; 2004-132912/13.

XX New antisense oligonucleotide for modulating endothelial lipase  
PT expression, for diagnosing, preventing or treating e.g. dyslipidemia, low  
PT high density lipoprotein or cardiovascular disorders.  
XX

PS Claim 3; SEQ ID NO 2512; 1007pp; English.

XX The present invention relates to antisense oligonucleotides (ADJ21603-  
CC ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence  
CC (ADJ25517), where the antisense oligonucleotide specifically hybridises  
CC with and inhibits the expression of EL. The antisense oligonucleotides  
CC are useful for modulating the expression of endothelial lipase in cells  
CC or tissues to treat diseases associated with EL expression, such as  
CC dyslipidaemia, low high density lipoprotein (HDL), cardiovascular  
CC disorder or metabolic syndrome X. In addition, the oligonucleotides are  
CC used for diagnostics, prophylaxis, or as research reagents or kits.

XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 460 GACATCAACAAGCGCTATC 479  
Dd 20 GACATCCACAAGAGGCTCTC 1  
|||||

RESULT 2036  
ADJ22164/c  
ID ADJ22164 standard; DNA; 20 BP.

AC ADJ22164;

XX 20-MAY-2004 (first entry)

DE Human endothelial lipase antisense oligonucleotide, SEQ ID 562.

KW Antilipemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;  
KW Human; Endothelial lipase; dyslipidaemia; high density lipoprotein; HDL;  
KW cardiovascular disorder; metabolic syndrome X; ss.

OS Homo sapiens.

OS Synthetic.







SQ Sequence 20 BP; 8 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1452 TCATTCTTCCAGTCG 1471
Db 20 TCATTCTTCCAGTCG 1
RESULT 2041
ADL00735
ID ADL00735 standard; DNA; 20 BP.
XX
AC ADL00735;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #268.
XX
XX Human; VEGF co-regulated chemokine-1; VCC-1;
KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular disorder; neurological disorder;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW fibrosis; myocardial infarction; wound healing; bone fracture;
KW cartilage damage; tissue regeneration; organ regeneration;
KW periodontal disease; gut regeneration; atrial fibrillation.
XX
OS Homo sapiens.
XX
XX WO2004016224-A2.
XX
XX 26-FEB-2004.
XX
XX 19-AUG-2003; 2003WO-US025891.
XX
XX 19-AUG-2002; 2002US-0404484P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Weinstein EU;
XX
XX WPI; 2004-192065/18.
XX
XX New antisense compounds targeted to a nucleic acid molecule encoding
PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
PT neurologic disorder.
XX
XX Claim 4; SEQ ID NO 268; 336pp; English.
XX
XX The invention relates to an antisense compound targeted to a nucleic acid
CC molecule encoding human vascular endothelial growth factor (VEGF) co-
CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
CC inhibits the expression of VCC-1. The invention also relates to a
CC composition comprising the antisense compound, a method of inhibiting the
CC expression of VCC-1 in cells or tissues comprising contacting the cells
CC or tissues with the antisense compound and a method of treating a human
CC having a disease or condition associated with VCC-1 comprising
CC administering the antisense compound to an animal to inhibit expression
CC of VCC-1. The antisense oligonucleotide comprises at least one modified
CC internucleoside linkage, preferably a phosphorothioate linkage. It also
CC comprises at least one modified sugar moiety, preferably a 2'-O-
CC methoxyethyl sugar moiety, and at least one modified nucleobase,
CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably
CC is a chimeric oligonucleotide. The antisense compound is useful for
CC treating a disease or condition associated with VCC-1, such as diabetes,
CC an immunological disorder, a cardiovascular disorder, a neurologic
CC disorder, ischaemia, reperfusion injury, cancer or an angiogenic

CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
CC antisense oligonucleotides may also be used for wound healing, for
CC healing of bone fractures and cartilage damage, for regeneration of
CC tissues or organs, for treating periodontal diseases, for gut protection
CC or regeneration, for treatment of lung or liver fibrosis or for
CC management of atrial fibrillation. This sequence represents an antisense
CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
CC the invention.
XX
XX Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 753 GGAAGTGTCCTGCTCAAGG 772
Db 1 GGAAGGTTCCTGCTGGAGG 20
RESULT 2042
ADL00975
ID ADL00975 standard; DNA; 20 BP.
XX
XX ADL00975;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #508.
XX
XX Human; VEGF co-regulated chemokine-1; VCC-1;
KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular disorder; neurological disorder;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW fibrosis; myocardial infarction; wound healing; bone fracture;
KW cartilage damage; tissue regeneration; organ regeneration;
KW periodontal disease; gut regeneration; atrial fibrillation.
XX
XX Homo sapiens.
XX
XX WO2004016224-A2.
XX
XX 26-FEB-2004.
XX
XX 19-AUG-2003; 2003WO-US025891.
XX
XX 19-AUG-2002; 2002US-0404484P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Weinstein EU;
XX
XX WPI; 2004-192065/18.
XX
XX New antisense compounds targeted to a nucleic acid molecule encoding
PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
PT neurologic disorder.
XX
XX Claim 4; SEQ ID NO 508; 336pp; English.
XX
XX The invention relates to an antisense compound targeted to a nucleic acid
CC molecule encoding human vascular endothelial growth factor (VEGF) co-
CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
CC inhibits the expression of VCC-1. The invention also relates to a
CC composition comprising the antisense compound, a method of inhibiting the
CC expression of VCC-1 in cells or tissues comprising contacting the cells
CC or tissues with the antisense compound and a method of treating a human
CC having a disease or condition associated with VCC-1 comprising

administering the antisense compound to an animal to inhibit expression of VCC-1. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, ischaemia, reperfusion injury, cancer or an angiogenic disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis, atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of tissues or organs, for treating periodontal diseases, for gut protection or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of the invention.

Sequence 20 BP; 9 A; 5 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 660 CTACAAAGGCAAAAGCAAGC 679  
|||||  
DB 1 CTACAAAGGCAAGCAAGC 20

## RESULT 2043

ADL00773

ID ADL00773 standard; DNA; 20 BP.

XX

AC ADL00773;

XX

DT 20-MAY-2004 (first entry)

XX

DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #306.

XX

KW Human; VEGF co-regulated chemokine-1; VCC-1;  
KW vascular endothelial growth factor; ss; antisense compound;  
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;  
KW 5-methylcytosine; antisense oligonucleotide; diabetes;  
KW immunological disorder; cardiovascular disorder; neurological disorder;  
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;  
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;  
KW fibrosis; myocardial infarction; wound healing; bone fracture;  
KW cartilage damage; tissue regeneration; organ regeneration;  
KW periodontal disease; gut regeneration; atrial fibrillation.

XX Homo sapiens.

OS

XX

FN WO2004016224-A2.

XX

PD 26-FEB-2004.

XX

PF 19-AUG-2003; 2003WO-US025891.

XX

PR 19-AUG-2002; 2002US-040484P.

XX

PA (PHAA ) PHARMACIA CORP.

XX

PI Weinstein EJ;

XX

DR WPI; 2004-192065/18.

XX

PT New antisense compounds targeted to a nucleic acid molecule encoding  
PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),  
PT useful for treating VCC-1-associated disorders, e.g. diabetes or a  
PT neurologic disorder.

XX

PS Claim 4; SEQ ID NO 306; 336pp; English.

XX The invention relates to an antisense compound targeted to a nucleic acid molecule encoding human vascular endothelial growth factor (VEGF) co-regulated chemokine-1 (VCC-1), and which specifically hybridises with and inhibits the expression of VCC-1. The invention also relates to a composition comprising the antisense compound, a method of inhibiting the expression of VCC-1 in cells or tissues comprising contacting the cells or tissues with the antisense compound and a method of treating a human having a disease or condition associated with VCC-1 comprising administering the antisense compound to an animal to inhibit expression of VCC-1. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, ischaemia, reperfusion injury, cancer or an angiogenic disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis, atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of tissues or organs, for treating periodontal diseases, for gut protection or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of the invention.

Sequence 20 BP; 9 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 661 TACAAAGGCAAAAGCAAGCT 680  
|||||

DB 1 TACAAAGGCAAGCAAGCT 20

## RESULT 2044

ADM53450

ID ADM53450 standard; DNA; 20 BP.

XX

AC ADM53450;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human Fas ligand FasL antisense oligonucleotide seqid 39.

XX

KW immunosuppressive; antiinflammatory; hepatotropic; virucide; cytostatic;  
KW antisense technology; Fas; Fas ligand; FasL; Fas associated disorder;  
KW Fas-1 associated disorder; ischaemia reperfusion injury; apoptosis;  
KW allograft; autoimmune disease; inflammatory disease; hepatitis; cancer;  
KW lymphoma; human; fas ligand; FasL; antisense oligonucleotide; ss.

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
are 5-methylcytidines"

FT modified\_base 1..5

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

FT modified\_base 15..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

```

XX PN US2004033979-A1.
XX PD 19-FEB-2004.
XX PF 14-JUL-2003; 2003US-00619220.
XX PR 12-APR-1999; 99US-00290640.
XX PR 18-SEP-2000; 2000US-00665615.
XX PR 09-MAR-2001; 2001US-00802669.
XX (DEAN/) DEAN N M.
XX (MARC/) MARCUSSE E G.
XX (WYATT/) WYATT J.
XX (ZHANG/) ZHANG H.
XX Dean NM, Marcussen EG, Wyatt J, Zhang H;
XX WPI; 2004-180091/17.
XX DR
XX PT New antisense compound targeted to nucleic acid molecule encoding Fas or
XX PT Fas-1, useful in diagnosing, treating or preventing autoimmune or
XX PT inflammatory disease, cancer, apoptosis, allograft rejection or ischemia
XX PT reperfusion injury.
XX PS Example 3; SEQ ID NO 39; 83pp; English.
XX CC The invention describes an antisense compound 8-30 or 8-50 nucleobases in
XX CC length targeted to the 5'-untranslated region, translational start site,
XX CC translational termination region or 3'-untranslated region of a nucleic
XX CC acid molecule encoding Fas, Fas ligand or Fas-1. Also described are: a
XX CC pharmaceutical composition comprising the anti-sense compound and a
XX CC pharmaceutical carrier or diluent; a method of inhibiting the expression
XX CC of Fas or Fas-1 in cells or tissues; treating an animal having a disease
XX CC or condition associated with Fas or Fas-1; and preventing allograft
XX CC rejection, ischaemia reperfusion injury or apoptosis in an allograft
XX CC recipient. The antisense compound and pharmaceutical composition is
XX CC useful in diagnosing, treating or preventing autoimmune or inflammatory
XX CC disease, e.g. hepatitis, cancer, e.g. cancer of the colon, liver, lung or
XX CC a lymphoma, apoptosis, allograft rejection, e.g. cardiac, renal, hepatic
XX CC or skin allograft and ischemia reperfusion injury. This sequence
XX CC represents a human Fas ligand (FasL) antisense oligonucleotide.
XX SQ Sequence 20 BP; 3 A; 10 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1659 CACCCCTCACAGGCGACGCC 1678
Db 1 CCCTCTTCACATGCGACGCC 20
RESULT 2045
ADM46466/C
ID ADM46466 standard; DNA; 20 BP.
XX AC ADM46466;
XX XX
XX DT 03-JUN-2004 (first entry)
XX DE Antisense oligonucleotide targeting human ICAM-1 #15.
XX KW Antisense; ss; human; intercellular adhesion molecule; ICAM-1;
XX KW vascular cell adhesion molecule; VCAM-1;
XX KW endothelial leukocyte adhesion molecule; ELAM-1;
XX KW inflammatory ophthalmological disorder; redness; inflammation;
XX KW corneal explant; corneal allograft rejection.
XX OS Homo sapiens.
XX PN US2004033977-A1.

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XX 19-FEB-2004.
XX PF 04-JUN-2003; 2003US-00454663.
XX PR 14-AUG-1990; 90US-00567286.
XX PR 02-SEP-1992; 92US-00939855.
XX PR 21-JAN-1993; 93US-00007997.
XX PR 10-FEB-1993; 93US-00969151.
XX PR 17-MAY-1993; 93US-00063167.
XX PR 12-MAY-1995; 95US-00440740.
XX PR 03-AUG-1998; 98US-00128496.
XX PR 12-SEP-2000; 2000US-00659288.
XX PR 18-OCT-2001; 2001US-00982262.
XX (BENNETT/) BENNETT C F.
XX (MIRA/) MIRABELLI C.
XX Bennett CF, Mirabelli C;
XX WPI; 2004-180090/17.
XX DR
XX PT New antisense oligonucleotide, useful for diagnosing, as research
XX PT reagents and for treating disease states, which respond to modulation of
XX PT the synthesis or metabolism of cell adhesion molecules.
XX PS Example 5; SEQ ID NO 15; 72pp; English.
XX CC The invention relates to an antisense oligonucleotide targeting human
XX CC intercellular adhesion molecule (ICAM-1) having a sequence appearing as
XX CC ADM46473. In the oligonucleotide, at least one adenosine nucleotide is
XX CC replaced with a thymidine, cytidine or guanosine nucleotide, at least one
XX CC thymidine nucleotide is replaced with an adenosine, cytidine or guanosine
XX CC nucleotide, at least one guanosine nucleotide is replaced with an
XX CC adenosine, thymidine or cytidine nucleotide or at least one cytidine
XX CC nucleotide is replaced with an adenosine, cytidine or guanosine
XX CC nucleotide. The oligonucleotide is one of 88 disclosed antisense
XX CC oligonucleotides targeting ICAM-1, vascular cell adhesion molecule (VCAM-
XX CC 1) or endothelial leukocyte adhesion molecule (ELAM-1). Also included are
XX CC an RNA compound 8-80 nucleobases in length targeted to human ICAM-1 mRNA
XX CC (where the compound specifically hybridises with the human ICAM-1 mRNA
XX CC and inhibits the expression of human ICAM-1 mRNA), and a double stranded
XX CC RNA compound having the RNA equivalent sequence of ADM46473. The
XX CC oligonucleotide is useful for modulating the activity of the RNA and DNA
XX CC and the modulation of the synthesis and metabolism of specific cell
XX CC adhesion molecules. It is also useful for the diagnosis, as research
XX CC reagents and for treating disease states, which respond to modulation of
XX CC the synthesis or metabolism of cell adhesion molecules. The
XX CC oligonucleotide is suitable for treating inflammatory ophthalmological
XX CC disorders including redness and inflammation caused by allergens and
XX CC allergic reactions. The oligonucleotides can also be used to preserve
XX CC corneal explants ex vivo and to prevent corneal allograft rejections. The
XX CC specific hybridisation exhibited by the oligonucleotides may be used for
XX CC assays, purifications or cellular product preparations. The present
XX CC sequence is an antisense oligonucleotide targeting ICAM-1.
XX SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGGTGGTGGTGGCGG 245
Db 20 GAGAGGGGAAGTGGTGGGGG 1
RESULT 2046
ADM78591/C
ID ADM78591 standard; DNA; 20 BP.
XX XX
XX XX ADM78591;
XX XX

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```
DT 03-JUN-2004 (first entry)
DE Human transcription factor Dp-1 DNA antisense oligonucleotide #4.
KW Human; transcription factor; Dp-1; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; developmental disorder; hyperproliferative disorder;
KW cancer; lymphoma; aberrant apoptosis; infection; inflammation;
KW cytostatic; antiinflammatory; antimicrobial.
OS Homo sapiens.
XX
XX US2003225012-A1.
XX
XX 04-DEC-2003.
XX
XX 31-MAY-2002; 2002US-00160554.
XX
XX 31-MAY-2002; 2002US-00160554.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Freier SM;
XX
XX WPI; 2004-042169/04.
XX
XX New antisense oligonucleotides inhibiting the expression of transcription
XX factor Dp-1, useful for preventing or treating diseases associated with
XX transcription factor Dp-1, such as developmental or hyperproliferative
XX disorders.
XX
XX Example 15; SEQ ID NO 14; 40pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding the human transcription factor Dp-1 polypeptide. The compound is
XX an antisense oligonucleotide that specifically hybridises with the
XX nucleic acid molecule encoding transcription factor Dp-1 and inhibits
XX expression of the polypeptide. The antisense oligonucleotide comprises at
XX least one modified internucleoside linkage i.e. a phosphorothioate
XX linkage, at least one modified sugar moiety, preferably a 2'-O-
XX methoxyethyl sugar moiety, or at least one modified nucleobase comprising
XX a 5-methylcytosine. The antisense compounds are useful for modulating the
XX expression of transcription factor Dp-1 and for preventing or treating
XX developmental disorders, hyperproliferative disorders (i.e. cancer,
XX particularly lymphoma), and diseases or conditions that arise as a result
XX of aberrant apoptosis. The antisense compounds may also be used in
XX research and diagnostics and in preventing or delaying infection or
XX inflammation. This sequence represents an antisense oligonucleotide of
XX the invention.
XX
XX Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1672 GCAGCCCCCACTACATCTT 1691
XX ||||| ||||| ||||| |||||
XX Db 20 GCTGCCGACACCATCTT 1
XX
XX RESULT 2047
XX ADM28997
XX ID ADM28997 standard; DNA; 20 BP.
XX
XX AC ADM28997;
XX
XX 17-JUN-2004 (first entry)
XX
XX Human IL4R related primer SEQ ID NO:36.
XX
XX type 1 diabetes; detection; polymorphism; interleukin 4; IL4;
XX interleukin 13; IL13; immunology; molecular biology; autoimmune disease;
KW
```

```
KW multiple sclerosis; myasthenia gravis; ulcerative colitis;
KW pernicious anaemia; rheumatoid arthritis; systemic lupus erythematosus;
KW inflammatory bowel disease; human; interleukin 4 receptor; IL4R; primer;
KW ss; single nucleotide polymorphism; SNP; chromosome 16.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX EP1405921-A1.
XX
XX 07-APR-2004.
XX
XX 01-OCT-2003; 2003EP-00022242.
XX
XX 04-OCT-2002; 2002US-00264965.
XX
XX 08-OCT-2002; 2002US-00267844.
XX
XX (HOFF) ROCHE DIAGNOSTICS GMBH.
XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
XX
XX Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX
XX WPI; 2004-318714/30.
XX
XX Detecting an individual's risk for autoimmune diseases, in particular
XX type 1 diabetes, by determining sequence variants or polymorphisms
XX present at the IL-4 and IL-13 loci.
XX
XX Example 1; SEQ ID NO 36; 168pp; English.
XX
XX The present invention describes a method for determining an individual's
XX risk for type 1 diabetes. The method comprises detecting the presence of
XX a type 1 diabetes-associated polymorphism in the interleukin 4 (IL4) or
XX IL13 loci in a nucleic acid sample of the individual, where the presence
XX of the polymorphism indicates the individual's risk for type 1 diabetes.
XX The human IL4 and IL13 genes are located on chromosome 5. Also described
XX is a kit for determining an individual's risk for type 1 diabetes,
XX comprising one or more sequence-specific oligonucleotide each
XX individually comprising a sequence that hybridises under stringent
XX conditions to a type 1 diabetes-associated IL4 or IL13 polymorphism, and
XX instructions to use the kit to determine the individual's risk for type 1
XX diabetes. Detection of one or more IL4 or IL13 polymorphisms in a nucleic
XX acid sample of an individual, is useful for the determination of the
XX individual's risk for type 1 diabetes. The methods and compositions of
XX the present invention are also useful in the field of immunology and
XX molecular biology, in particular for detecting an individual's risk for
XX autoimmune diseases, such as multiple sclerosis, myasthenia gravis,
XX ulcerative colitis, pernicious anaemia, rheumatoid arthritis, systemic
XX lupus erythematosus and inflammatory bowel disease. The present sequence
XX represents a primer for human IL4 receptor (IL4R), which is used in the
XX exemplification of the present invention. The human IL4R gene is located
XX on chromosome 16.
XX
XX Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1521 GGAGATTCAGCTACAAAGG 1540
XX | ||| ||||| ||||| |||||
XX Db 1 GCAGACTCAGCAACAGAGG 20
XX
XX RESULT 2048
XX ADM77983/C
XX ID ADM77983 standard; DNA; 20 BP.
XX
XX AC ADM77983;
XX
XX 17-JUN-2004 (first entry)
XX
XX RT-PCR primer used to amplify human GAPDH as a control SeqID 21.
XX
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XX RT-PCR; primer; ss; PCR; ovarian endometriosis;
KW differentially expression; OEX; microarray; cytostatic; vaccine; GAPDH.
XX
XX OS
XX WO2004024952-A1.
XX
XX PD
XX 25-MAR-2004.
XX
XX 12-AUG-2003; 2003WO-JP010257.
XX
XX 30-AUG-2002; 2002US-0407365P.
XX
XX 28-FEB-2003; 2003US-0450920P.
XX
XX (ONCO-) ONCOTHERAPY SCI INC.
XX (UYTY ) UNIV TOKYO.
XX
XX Nakamura Y, Katagiri T;
XX
XX WPI; 2004-340194/31.
XX
XX Diagnosing, treating and preventing ovarian endometriosis comprises
XX determining the expression level of an ovarian endometriosis-associated
XX gene in the sample.
XX
XX Example 2; SEQ ID NO 21; 103pp; English.
XX
XX This invention relates to a novel method for the diagnosis of, or
XX identification of a predisposition to, ovarian endometriosis.
XX Specifically, it refers to identifying differentially expressed ovarian
XX endometriosis associated (OEX) genes that are up- or down- regulated
XX compared to a control. The present invention describes a comprehensive
XX cDNA microarray system to identify differentially expressed OEX genes
XX such as tissue factor pathway inhibitor-2 (TFPI-2) and interlectin (ITLN).
XX Accordingly, cytostatic pharmaceutical compositions can be targeted to
XX the identified OEX genes as appropriate. Furthermore, it provides
XX methods, kits and compositions for the development of vaccines to treat
XX or prevent ovarian endometriosis. This oligonucleotide sequence is an RT-
XX PCR primer used to amplify human GAPDH as a control, given in an
XX exemplification of the invention.
XX
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 621 TAAGCTGGACAAACTGGGCG 640
DB 20 TGAGCTTGACAAAGTGGTCG 1

RESULT 2049
ADN03529
ID ADN03529 standard; DNA; 20 BP.
XX
XX ADN03529;
XX
XX 01-JUL-2004 (first entry)
XX
XX Mouse Ptc cDNA amplifying RT-PCR primer #1.
XX
XX Embryonic stem cell; ES cell; pancreatic islet-like cell;
KW type I diabetes; nerve-like cell; nerve function; cell therapy;
KW reverse transcription; RT; PCR; primer; mouse; ss; cell differentiation;
KW SHH signal receptor; Ptc.
XX
XX Mus sp.
XX
XX US2004072344-A1.
XX
XX 15-APR-2004.
PD

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XX 25-JUL-2003; 2003US-00626772.
XX
XX 25-JAN-2002; 2002US-00054789.
XX
XX (INOUE/) INOUE K.
XX (KIMD/) KIM D.
XX (GUYU/) GU Y.
XX (ISHI/) ISHII M.
XX
XX Inoue K, Kim D, Gu Y, Ishii M;
XX
XX WPI; 2004-328577/30.
XX
XX Inducing mammalian embryonic stem (ES) cell differentiation into
XX functioning cells, for treating e.g. diabetes, by culturing mammalian ES
XX cells in a medium having leukemia inhibitory factor and basic FGF to give
XX embryonic bodies.
XX
XX Example 5; SEQ ID NO 33; 30pp; English.
XX
XX The invention relates to a method for inducing differentiation of
XX mammalian embryonic stem (ES) cells into functioning cells. The method is
XX useful for inducing differentiation of mammalian ES cells into
XX functioning cells. The pancreatic islet-like cell clusters induced from
XX allogenic ES cells are useful for treating a mammalian patient having
XX disorders in pancreatic islet function, such as when the patient is a
XX type I diabetic patient. The nerve-like cells induced from allogenic ES
XX cells can be used for treating a mammalian patient having disorders in
XX nerve function. The method is also useful in cell therapy. The present
XX sequence is a reverse transcription (RT)-PCR primer used to amplify mouse
XX SHH signal receptor, patched (Ptc) cDNA. This sequence is used to
XX illustrate the method of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 614 CCTACATTAAGCTGGACAAA 633
DB 1 CCTCCTTTACGCTGGACAAA 20

RESULT 2050
ADN03871/C
ID ADN03871 standard; DNA; 20 BP.
XX
XX ADN03871;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human ICAM-specific antisense oligonucleotide #1.
XX
XX Antisense activity; down-regulation; antisense; ICAM; human; ss.
XX
XX Homo sapiens.
XX
XX US2004073376-A1.
XX
XX 15-APR-2004.
XX
XX 14-JAN-2002; 2002US-00050888.
XX
XX 19-JAN-2001; 2001US-0262993P.
XX
XX (UTAH ) UNIV UTAH RES FOUND.
XX
XX Gesteland RF, Atkins JF, Matveeva OV, Giddings MC;
XX
XX WPI; 2004-364070/34.
XX

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PT Predicting antisense activity of an oligonucleotide for down-regulating  
 PT expression of an RNA, comprises developing an artificial neural network,  
 PT determining counts of mapped sequence motifs, and obtaining a output of  
 PT activity.

PS Disclosure; SEQ ID NO 7; 25pp; English.

XX The present invention relates to the method for making an artificial  
 CC neural network embodied on a computer-readable medium for predicting  
 CC antisense activity of oligonucleotides for down-regulating expression of  
 CC a selected RNA. The invention provides a five-fold reduction in the  
 CC number of oligonucleotides to be screened in vivo to find effective  
 CC targets. The present sequence is human ICAM-specific antisense  
 CC oligonucleotide. This sequence is used in the invention.

XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. NO. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGGTGGTGGGGG 245

Db 20 GAGAGGGGAGTGGGGGG 1

RESULT 2051

ADN62157

ID ADN62157 standard; DNA; 20 BP.

XX ADN62157;

XX 01-JUL-2004 (first entry)

XX Human NOV12a RTQ-PCR forward primer.

XX Human; ss; PCR; NOVX; diabetes; obesity; infectious disease; anorexia;  
 KW cancer-associated cachexia; cancer; neurodegenerative disorder;  
 KW Alzheimer's disease; Parkinson's disease; immune disorder;  
 KW haematopoietic disorder; dyslipidaemia; chronic disease; primer; RTQ-PCR;  
 KW real time quantitative PCR.

XX Homo sapiens.

XX US2004043382-A1.

XX 04-MAR-2004.

XX 07-MAR-2002; 2002US-00092900.

XX 08-MAR-2001; 2001US-0274191P.

XX 08-MAR-2001; 2001US-0274194P.

XX 08-MAR-2001; 2001US-0274281P.

XX 08-MAR-2001; 2001US-0274322P.

XX 09-MAR-2001; 2001US-0274849P.

XX 12-MAR-2001; 2001US-0275235P.

XX 13-MAR-2001; 2001US-0275578P.

XX 13-MAR-2001; 2001US-0275579P.

XX 13-MAR-2001; 2001US-0275601P.

XX 14-MAR-2001; 2001US-0276000P.

XX 16-MAR-2001; 2001US-0276776P.

XX 19-MAR-2001; 2001US-0276994P.

XX 20-MAR-2001; 2001US-0277239P.

XX 20-MAR-2001; 2001US-0277321P.

XX 20-MAR-2001; 2001US-0277327P.

XX 20-MAR-2001; 2001US-0277338P.

XX 21-MAR-2001; 2001US-0277791P.

XX 22-MAR-2001; 2001US-0277833P.

XX 23-MAR-2001; 2001US-0278152P.

XX 26-MAR-2001; 2001US-0278894P.

XX 27-MAR-2001; 2001US-0278999P.

XX 27-MAR-2001; 2001US-0279036P.

XX 28-MAR-2001; 2001US-0279344P.

PR 30-MAR-2001; 2001US-0279995P.  
 PR 30-MAR-2001; 2001US-0280233P.  
 PR 02-APR-2001; 2001US-0280802P.  
 PR 02-APR-2001; 2001US-0280822P.  
 PR 04-APR-2001; 2001US-0280900P.  
 PR 04-APR-2001; 2001US-0281444P.  
 PR 13-APR-2001; 2001US-0283675P.  
 PR 30-APR-2001; 2001US-0287424P.  
 PR 02-MAY-2001; 2001US-0288066P.  
 PR 03-MAY-2001; 2001US-0288342P.  
 PR 03-MAY-2001; 2001US-0288528P.  
 PR 15-MAY-2001; 2001US-0291190P.  
 PR 16-MAY-2001; 2001US-0291099P.  
 PR 16-MAY-2001; 2001US-0291240P.  
 PR 30-MAY-2001; 2001US-0294485P.  
 PR 31-MAY-2001; 2001US-0294889P.  
 PR 31-MAY-2001; 2001US-0294899P.  
 PR 18-JUN-2001; 2001US-0299027P.  
 PR 19-JUN-2001; 2001US-0299303P.  
 PR 19-JUN-2001; 2001US-0299310P.  
 PR 10-JUL-2001; 2001US-0304354P.  
 PR 31-JUL-2001; 2001US-0309198P.  
 PR 16-AUG-2001; 2001US-0312903P.  
 PR 10-SEP-2001; 2001US-0318462P.  
 PR 12-SEP-2001; 2001US-0318770P.  
 PR 27-SEP-2001; 2001US-0325430P.  
 PR 27-SEP-2001; 2001US-0325681P.  
 PR 18-OCT-2001; 2001US-0330380P.  
 PR 31-OCT-2001; 2001US-0335301P.  
 PR 14-NOV-2001; 2001US-0332172P.  
 PR 14-NOV-2001; 2001US-0332271P.  
 PR 14-NOV-2001; 2001US-0332272P.  
 PR 14-NOV-2001; 2001US-0333184P.  
 PR 21-NOV-2001; 2001US-0333272P.  
 PR 03-DEC-2001; 2001US-0332094P.  
 PR 03-DEC-2001; 2001US-0337426P.  
 PR 04-DEC-2001; 2001US-0338092P.  
 PR 04-DEC-2001; 2001US-0337185P.  
 PR 03-JAN-2002; 2002US-0345705P.

XX (PADI/) PADIGARU M.

PA (SPYT/) SPYTEK K A.

PA (SHEN/) SHENOY S G.

PA (TAUP/) TAUPIER R J.

PA (PENA/) PENA C E A.

PA (LILL/) LI L.

PA (ZERH/) ZERHUSEN B D.

PA (GUSE/) GUSEV V Y.

PA (JIWW/) JI W.

PA (GORM/) GORMAN L.

PA (MILL/) MILLER C E.

PA (KEKU/) KEKUDA R.

PA (PATT/) PATTURAJAN M.

PA (GANG/) GANGOLLI E A.

PA (VERN/) VERNET C A M.

PA (GUOX/) GUO X S.

PA (TCHE/) TCHERNEV V T.

PA (FERN/) FERNANDES E R.

PA (CASM/) CASMAN S J.

PA (MALY/) MALYANKAR U M.

PA (GERL/) GERLACH V.

PA (LIUY/) LIU Y.

PA (ANDE/) ANDERSON D W.

PA (SPAD/) SPADERNA S K.

PA (CATT/) CATTERTON E.

PA (LEIT/) LEITE M W.

PA (ZHON/) ZHONG H.

PA (ALSO/) ALSOBROOK J P.

PA (LEPL/) LEPLEY D M.

PA (RIEG/) RIEGER D K.

XX (BURG/) BURGESS C E.

PI Padigaru M, Spytek KA, Shenoy SG, Taupier RJ, Pena CEA, Li L;



PI Zerhusen BD, Gusev VV, Ji W, Gorman L, Miller CB, Kekuda R;  
 PI Patturajan M, Gangolli EA, Vernet CAM, Guo XS, Tchernev VT;  
 PI Fernandes ER, Casman SJ, Malyankar UM, Gerlach V, Liu Y;  
 PI Anderson DW, Spaderna SK, Catterton E, Leite MW, Zhong H;  
 PI Alsbrook JP, Lepley DM, Rieger DK, Burgess CB;  
 XX WPI; 2004-225693/21.  
 DR  
 XX New NOVX polypeptides and nucleic acid molecules useful for diagnosing,  
 PT preventing or treating NOVX-associated disorders, e.g. cancer, diabetes,  
 PT infection or obesity, and in chromosome mapping, tissue typing or  
 PT pharmacogenomics.  
 PT  
 XX Example C; SEQ ID NO 426; 786pp; English.  
 PS  
 XX The invention relates to an isolated polypeptide (designated NOVX, or  
 CC NOV1-NOV127) comprising a sequence selected from 178 fully defined amino  
 CC acid sequences (and their mature forms, variants and fragments). Also  
 CC included are an isolated nucleic acid molecule encoding NOVx, a vector  
 CC comprising the nucleic acid, a cell comprising the vector, methods for  
 CC determining the presence or amount of the polypeptide or the nucleic acid  
 CC molecule in a sample, methods for determining the presence of or  
 CC predisposition to a disease associated with altered levels of expression  
 CC of the above polypeptide or nucleic acid molecule in a first mammalian  
 CC subject, a method for identifying an agent that binds to the above  
 CC polypeptide, a method for identifying a potential therapeutic agent for  
 CC use in the treatment of a pathology that is related to aberrant  
 CC expression or physiological interactions of the polypeptide, a method of  
 CC screening for a modulator of activity or of latency or predisposition to  
 CC a pathology associated with the polypeptide and a method for modulating  
 CC the activity of the polypeptide cited above. The composition and methods  
 CC are useful for diagnosing, preventing or treating diseases such as  
 CC diabetes, obesity, infectious diseases, anorexia, cancer-associated  
 CC cachexia, cancer, neurodegenerative disorders like Alzheimer's disease or  
 CC Parkinson's disease, immune disorders, haematopoietic disorders,  
 CC dyslipidaemias, and other chronic diseases. These may also be used in  
 CC chromosome mapping, tissue typing, preventive medicine and  
 CC pharmacogenomics. The polypeptides are also useful as vaccines. The  
 CC present sequence is an RT-PCR (real time quantitative PCR) primer used  
 CC to assay tissue specific expression of a NOVX mRNA.  
 XX  
 SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 306 CCCACTCAGCTCTGCACCAG 325  
 |||||  
 Db 1 CCCATTGAGCACTGAACAG 20  
 RESULT 2052  
 ADM14784/c  
 ID ADM14784 standard; DNA; 20 BP.  
 AC  
 XX ADM14784;  
 XX  
 DT 01-JUL-2004 (first entry)  
 XX  
 XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:971.  
 DE  
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;  
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;  
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;  
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;  
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;  
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;  
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;  
 KW reperfusion injury; ophthalmic disorder; immunological disorder;  
 KW cardiovascular disorder; neurological disorder; ss.  
 XX  
 OS Homo sapiens.

OS Synthetic.  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /notes= "phosphorothioate linkages and all cytidine  
 residues are 5-methylcytidines"  
 FT  
 FT modified\_base 1..5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /notes= "2'-O-methoxyethyls"  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyls"  
 FT  
 XX WO2004028458-A2.  
 XX  
 XX 08-APR-2004.  
 PD  
 XX 25-SEP-2003; 2003WO-US030374.  
 PF  
 XX 25-SEP-2002; 2002US-0413549P.  
 PR  
 XX (PHAA ) PHARMACIA CORP.  
 PA  
 XX Gierse JK;  
 XX WPI; 2004-305094/28.  
 XX  
 XX New antisense compound, having a sequence targeted to a nucleic acid  
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,  
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or  
 PT ischemia.  
 PT  
 XX Claim 4; SEQ ID NO 971; 132pp; English.  
 PS  
 XX The present sequence represents a chimeric antisense oligonucleotide  
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The  
 CC human mPGES-1 gene is located on chromosome 9, more specifically to  
 CC 9q34.3. The present invention also describes: (1) antisense compounds,  
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding  
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and  
 CC inhibits its expression; (2) a method of inhibiting the expression of  
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal  
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric  
 CC antisense oligonucleotides and antisense compounds have cytostatic,  
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,  
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,  
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can  
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound  
 CC can be used for preparing a composition for treating a disease or  
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's  
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or  
 CC ophthalmic, immunological, cardiovascular or neurological disorder.  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1431 CGCAGAGGATGCCCATGAAC 1450  
 |||||  
 Db 20 CCCGAGGATGCCCTGAGAC 1  
 RESULT 2053  
 ADM14152/c  
 ID ADM14152 standard; DNA; 20 BP.  
 XX  
 XX ADM14152;  
 AC



XX DT 01-JUL-2004 (first entry)  
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:339.  
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;  
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;  
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;  
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;  
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;  
KW immunomodulatory; cardiovascular; gene therapy; inflammation;  
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;  
KW reperfusion injury; ophthalmic disorder; immunological disorder;  
KW cardiovascular disorder; neurological disorder; ss.  
XX OS Homo sapiens.  
XX OS Synthetic.  
XX FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate linkages and all cytidine  
FT residues are 5-methylcytidines"  
FT modified\_base 1..5  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyls"  
FT modified\_base 16..20  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyls"  
XX WO2004028458-A2.  
XX PD 08-APR-2004.  
XX PF 25-SEP-2003; 2003WO-US030374.  
XX PR 25-SEP-2002; 2002US-0413549P.  
XX PA (PHAA ) PHARMACIA CORP.  
XX PI Gierse JK;  
XX DR WPI; 2004-305094/28.  
XX PS New antisense compound, having a sequence targeted to a nucleic acid  
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,  
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or  
XX ischemia.  
XX PS Claim 4; SEQ ID NO 339; 132pp; English.  
XX CC The present sequence represents a chimeric antisense oligonucleotide  
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The  
XX human mPGES-1 gene is located on chromosome 9, more specifically to  
XX 9q34.3. The present invention also describes: (1) antisense compounds,  
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding  
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and  
XX inhibits its expression; (2) a method of inhibiting the expression of  
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal  
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric  
XX antisense oligonucleotides and antisense compounds have cytostatic,  
XX antidiabetic, immunomodulator, cardiant, neuroprotective,  
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,  
XX ophthalmological, immunomodulatory and cardiovascular activities, and can  
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound  
XX can be used for preparing a composition for treating a disease or  
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's  
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or  
XX ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 503 CTGAGGGCTACCTGGAGAG 522  
DB 20 CCGTGGCTACCTGGGAG 1  
RESULT 2054  
ADM14641  
ID ADM14641 standard; DNA; 20 BP.  
XX AC ADM14641;  
XX DT 01-JUL-2004 (first entry)  
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:828.  
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;  
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;  
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;  
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;  
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;  
KW immunomodulatory; cardiovascular; gene therapy; inflammation;  
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;  
KW reperfusion injury; ophthalmic disorder; immunological disorder;  
KW cardiovascular disorder; neurological disorder; ss.  
XX OS Homo sapiens.  
XX OS Synthetic.  
XX FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate linkages and all cytidine  
FT residues are 5-methylcytidines"  
FT modified\_base 1..5  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyls"  
FT modified\_base 16..20  
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FT /note= "2'-O-methoxyethyls"  
XX WO2004028458-A2.  
XX PD 08-APR-2004.  
XX PF 25-SEP-2003; 2003WO-US030374.  
XX PR 25-SEP-2002; 2002US-0413549P.  
XX PA (PHAA ) PHARMACIA CORP.  
XX PI Gierse JK;  
XX DR WPI; 2004-305094/28.  
XX PS New antisense compound, having a sequence targeted to a nucleic acid  
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,  
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or  
XX ischemia.  
XX PS Claim 4; SEQ ID NO 828; 132pp; English.  
XX CC The present sequence represents a chimeric antisense oligonucleotide  
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The  
XX human mPGES-1 gene is located on chromosome 9, more specifically to



FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyls"  
 FT modified\_base 16..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

PN 08-APR-2004.

PD 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

PR (PHAA ) PHARMACIA CORP.

XX Gierse JK;

PI WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid

PT encoding mPGES-1, useful for preparing a composition for treating e.g.,

PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

PT ischemia.

XX Claim 4; SEQ ID NO 783; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide

CC targeted to human microsomal prostaglandin H2 synthase (mPGES-1). The

CC human mPGES-1 gene is located on chromosome 9, more specifically to

CC 9q34.3. The present invention also describes: (1) antisense compounds,

CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

CC inhibits its expression; (2) a method of inhibiting the expression of

CC mPGES-1 in cells or tissues; and (3) a method of treating an animal

CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric

CC antisense oligonucleotides and antisense compounds have cytostatic,

CC antidiabetic, immunomodulator, cardiant, neuroprotective,

CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

CC ophthalmological, immunomodulatory and cardiovascular activities, and can

CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

CC can be used for preparing a composition for treating a disease or

CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's

CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 4 A; 3 C; 11 G; 2 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 232 GGTGTGTGTGGCGGAGTGA 251

Db 1 GGAGGCGGAGGCTGCAGTGA 20

RESULT 2057

ADO44054/c

ID ADO44054 standard; DNA; 20 BP.

XX ADO44054;

AC 15-JUL-2004 (first entry)

XX Nucleotide sequence of human polynucleotide #24.

DE hypertension; gene polymorphism; glycoprotein 1a; chemokine receptor 2;

XX apolipoprotein C-III; G-protein beta3 subunit;

KW tumour necrosis factor alpha; insulin receptor substrate 1;

KW glycoprotein Ibalpha; human; ss.

XX Homo sapiens.  
 OS WO2004029243-A1.  
 XX 08-APR-2004.  
 PD 22-SEP-2003; 2003WO-JP012052.  
 PF 25-SEP-2002; 2002JP-00280034.  
 XX (NAGO-) NAGOYA IND SCI RES INST.  
 PA (GIFU-) GIFU INT INST BIOTECHNOLOGY.  
 XX Yamada Y, Yokota M;  
 PI WPI; 2004-316120/29.  
 DR Analysis of specific single polynucleotide polymorphisms in a patient for  
 XX prediction of the genetic risk of developing hypertension.  
 PT Disclosure; Page 66-101; 130pp; Japanese.  
 PS The specification describes a method for prediction of genetic risk of  
 CC development of hypertension. The method comprises analysis the genotype  
 CC of specific gene polymorphisms in a clinical nucleic acid sample. The  
 CC gene polymorphisms analysed are one or both of the following two sets:  
 CC variation at base 1648 of glycoprotein 1a gene, variation at base 190 of  
 CC chemokine receptor 2 gene, variation at base 825 of G-protein beta3 subunit gene, and  
 CC gene, variation at base -850 of tumour necrosis factor alpha gene, and  
 CC variation at base -238 of tumour necrosis factor alpha gene, variation at  
 CC base -238 of tumour necrosis factor alpha gene, variation at base 3494 of  
 CC insulin receptor substrate 1 gene, variation at base 1018 of glycoprotein  
 CC Ibalpha gene. The present sequence represents a human polynucleotide,  
 CC which is referred to in the course of the invention.  
 XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 Qy 608 TGGAGACCTACATTAAGCTG 627  
 Db 20 TGTAGCCCTGCATGAAGCTG 1  
 RESULT 2058  
 ADO46740  
 ID ADO46740 standard; DNA; 20 BP.  
 XX ADO46740;  
 AC 15-JUL-2004 (first entry)  
 XX Human oligonucleotide #2106.  
 DE Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;  
 XX CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;  
 KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;  
 KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;  
 KW asthma; lung allergy; inflammation; inflammatory disease;  
 KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;  
 KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;  
 KW acute respiratory distress syndrome; pulmonary hypertension;  
 KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.  
 XX Homo sapiens.  
 OS US2004049022-A1.  
 XX 11-MAR-2004.

PF 25-JUL-2003; 2003US-00627930.  
XX  
PR 23-APR-2002; 2002WO-US013135.  
PR 23-APR-2002; 2002WO-US013143.  
XX  
XX (NYCE/) NYCE J W.  
PA (SAND/) SANDRASAGRA A.  
PA (TANG/) TANG L.  
PA (AGUI/) AGUILAR D.  
PA (MILL/) MILLER S.  
PA (SHAH/) SHAHABUDDIN S.  
PA (LUHH/) LU H.  
PA (CONG/) CONG H.  
XX  
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;  
PI Shahabuddin S, Lu H, Cong H;  
XX WPI; 2004-293804/27.  
XX  
XX Novel single or multiple target oligonucleotide anti-sense to e.g. CCR1,  
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,  
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.  
PT asthma.  
XX  
XX Claim 2; SEQ ID NO 2206; 174pp; English.  
PS  
XX The invention relates to oligonucleotides anti-sense to an initiation  
CC codon, coding region, 5' or 3' intron-exon junction, intron or region  
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target  
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)  
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,  
CC tryptase a, tryptase B, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention  
CC also relates to a method of screening a candidate compound that binds to  
CC one or more nucleic acid target(s) or expressed product(s), for the  
CC prevention and/or treatment of a respiratory or lung disease. The  
CC oligonucleotides are useful for reducing or inhibiting expression of a  
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,  
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,  
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are  
CC useful for preventing or treating a respiratory or lung disease. The  
CC respiratory or lung disease is associated with hyper-responsiveness to  
CC and/or increased levels of, adenosine and/or levels of adenosine A  
CC receptor(s), and/or asthma and/or lung allergies associated with  
CC inflammation or an inflammatory disease. The respiratory or lung disease  
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,  
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),  
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary  
CC hypertension, lung inflammation, bronchitis, airway obstruction or  
CC bronchoconstriction. This sequence represents an oligonucleotide of the  
CC invention.  
XX  
XX Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 1444 ATGAAACATCATCTTCCT 1463  
Db 1 ATGCAAAATGCTTCTTCCT 20  
RESULT 2059  
ADM16234  
ID ADM16234 standard; DNA; 20 BP.  
XX  
XX ADM16234;  
AC  
XX 15-JUL-2004 (first entry)  
DT  
XX Human SAC1 DNA PCR primer #45.  
DE  
XX Human; SAC1; PCR; ss; carbohydrate; sweetener; ethanol; obesity;  
KW

KW diabetes; alcoholism; antidiabetic; alcohol; anorectic; antialcoholic;  
XX primer.  
XX Homo sapiens.  
OS  
XX US2004081964-A1.  
PN  
XX 29-APR-2004.  
PD  
XX 25-OCT-2002; 2002US-00280183.  
PF  
XX 25-OCT-2002; 2002US-00280183.  
PR  
XX (BACH/) BACHMANOV A A.  
PA (BEAU/) BEAUCHAMP G K.  
PA (LISS/) LI S.  
PA (LIXX/) LI X.  
PA (REED/) REED D R.  
PA (TORD/) TORDOFF M G.  
PA (ROSS/) ROSS D A.  
PA (OHMA/) OHMAN J D.  
PA (CHAT/) CHATTERJEE A.  
PA (DUON/) DE JONG P J.  
XX  
XX Bachmanov AA, Beauchamp GK, Li S, Li X, Reed DR, Tordoff MG;  
PI Ross DA, Ohman JD, Chatterjee A, De Jong PJ;  
XX WPI; 2004-340133/31.  
XX  
XX New isolated polynucleotides for sensing carbohydrates, other sweeteners,  
PT or ethanol, useful for screening drugs for inhibition or restoration of  
PT gene function as antidiabetic, antioesity or antialcohol consumption  
PT therapies.  
XX  
XX Example 12; SEQ ID NO 504; 148pp; English.  
PS  
XX The invention relates to SAC1 polypeptides and the polynucleotides  
CC encoding them. The polynucleotides contain a variation associated with  
CC sensing carbohydrates, other sweeteners or ethanol. The invention also  
CC relates to a method for analysing a biomolecule in a biological sample,  
CC comprising altering SAC1 activity in the sample and measuring the  
CC activity, a method for analysing a polynucleotide in a biological sample,  
CC comprising contacting a polynucleotide in a biological sample with a  
CC probe where the probe hybridises to a SAC1 polynucleotide to form a  
CC hybridisation complex and detecting the hybridisation complex, a method  
CC of identifying susceptibility to obesity or diabetes comprising comparing  
CC the nucleotide sequence of the suspected SAC1 allele with a wild type  
CC and the wild-type sequence identifies a sequence variation of the SAC1  
CC nucleotide sequence, where the difference between the suspected allele  
CC nucleotide sequence, and a method of treating or preventing obesity,  
CC diabetes or alcoholism associated with expression of SAC1, comprising  
CC administering to a subject a pharmaceutical composition and a transgenic  
CC animal that carries an altered SAC1 allele. The methods and compositions  
CC of the invention are useful for screening drugs for inhibition or  
CC restoration of gene function as antidiabetic, antioesity or antialcohol  
CC consumption therapies and for identifying sweeteners and alcohols. This  
CC sequence represents a PCR primer used to amplify human SAC1 DNA of the  
CC invention.  
XX  
XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 851 TGGACAGGACCTGACGAC 870  
Db 1 TGGAGTAGCCTGAGCTG 20  
RESULT 2060  
ADN06392  
ID ADN06392 standard; DNA; 20 BP.

XX AC ADN06392;  
XX DT 15-JUL-2004 (first entry)  
XX DE Human FLAP related microsatellite marker SEQ ID NO:40.  
XX DE  
XX KW leukotriene synthesis inhibitor; myocardial infarction;  
XX KW acute coronary syndrome; antiatherosclerotic; cardiant; antianginal;  
XX KW leukotriene biosynthesis inhibitor; leukotriene receptor antagonist;  
XX KW 5-lipoxygenase activating protein; FLAP; human; chromosome 13;  
XX KW chromosome 13q12; polymorphism; 5-lipoxygenase gene promoter;  
XX KW 5-LO gene promoter; diabetes; hypertension; hypercholesterolemia;  
XX KW obesity; inflammatory marker; low density lipoprotein; cholesterol;  
XX KW high density lipoprotein; angina; atherosclerosis; microsatellite marker;  
XX KW ss.  
XX OS Homo sapiens.  
XX OS Synthetic.  
XX PN WO2004035741-A2.  
XX PN  
XX PD 29-APR-2004.  
XX PF 16-OCT-2003; 2003WO-US032556.  
XX PR 17-OCT-2002; 2002US-0419433P.  
XX PR 21-FEB-2003; 2003US-0449331P.  
XX PA (DECO-) DECODE GENETICS EHF.  
XX PI Heigadottir A, Gurney ME, Gulcher JR;  
XX DR WPI; 2004-357211/33.  
XX PT Use of leukotriene synthesis inhibitor for manufacture of a medicament  
XX PT for treatment for myocardial infarction or susceptibility to myocardial  
XX PT infarction in individual.  
XX PS Disclosure; SEQ ID NO 40; 306pp; English.  
XX CC The present invention describes using a leukotriene synthesis inhibitor  
XX CC (I) for the manufacture of a medicament for the treatment of myocardial  
XX CC infarction or susceptibility to myocardial infarction in an individual.  
XX CC Also described is a method (M1) for the treatment of acute coronary  
XX CC syndrome (ACS) in an individual comprising administering (I). (I) has  
XX CC antiatherosclerotic, cardiant and antianginal activities, and can be used  
XX CC as a leukotriene biosynthesis inhibitor, and a leukotriene receptor  
XX CC antagonist. (I) can be used for the manufacture of a medicament for the  
XX CC treatment of myocardial infarction or susceptibility to myocardial  
XX CC infarction in an individual who has at least one risk factor chosen from  
XX CC an at-risk haplotype for myocardial infarction, an at-risk haplotype in  
XX CC the 5-lipoxygenase activating protein (FLAP) gene, a polymorphism in a  
XX CC FLAP nucleic acid and an at-risk polymorphism in the 5-lipoxygenase (5-  
XX CC LO) gene promoter; in an individual who has at least one risk factor  
XX CC chosen from diabetes, hypertension, hypercholesterolemia, elevated  
XX CC ip(a), obesity, past or current smoker; in an individual having elevated  
XX CC inflammatory marker chosen from C-reactive protein (CRP), serum amyloid  
XX CC A, fibrinogen, leukotriene, leukotriene metabolite, interleukin-6, tissue  
XX CC necrosis factor-alpha, soluble vascular cell adhesion molecule (sVCAM),  
XX CC soluble intervascular adhesion molecule (sICAM), E-selectin, matrix  
XX CC metalloproteinase type-1, matrix metalloproteinase type-2, matrix  
XX CC metalloproteinase type-3 and matrix metalloproteinase type-9; in an  
XX CC individual having increased low density lipoprotein (LDL) cholesterol  
XX CC and/or decreased high density lipoprotein (HDL) cholesterol; in an  
XX CC individual having increased leukotriene synthesis; in an individual  
XX CC having previous myocardial infarction or acute coronary syndrome (ACS)  
XX CC event, stable angina; or in an individual who has atherosclerosis or who  
XX CC requires treatment to restore blood flow in arteries. (M1) is useful for  
XX CC treating an individual suffering from acute coronary syndrome chosen from  
XX CC unstable angina, non-ST-elevation myocardial infarction (NSTEMI) and ST-  
XX CC elevation myocardial infarction (STEMI). The human FLAP gene is located  
XX CC on chromosome 13, more specifically to 13q12. The present sequence

CC represents a microsatellite marker used in the exemplification of the  
CC present invention.  
XX  
SQ Sequence 20 BP; 8 A; 3 C; 9 G; 0 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.le+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 711 CAGACTGGAACTGATGAAGAGG 730  
Db 1 CAGAGAGGAACAGGCGAGG 20  
||||| ||||| ||||| |||||  
RESULT 2061  
AD054639  
ID AD054639 standard; DNA; 20 BP.  
XX  
AC AD054639;  
XX  
DT 15-JUL-2004 (first entry)  
XX  
DE Farnesoid X receptor gene expression antisense inhibitory oligo #2012.  
XX ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;  
XX KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;  
XX KW neuroprotective; vasotropic; antisense; gene therapy;  
XX KW Farnesoid X receptor; diabetes; immunological disorder;  
XX KW cardiovascular disorder; dyslipidemia; atherosclerosis;  
XX KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;  
XX KW gallstones; hypertriglyceridemia; obesity; neurological disorder;  
XX KW ischemia; reperfusion; diagnostics; prophylaxis.  
XX OS Homo sapiens.  
XX PN WO2004030750-A1.  
XX PD 15-APR-2004.  
XX PF 25-SEP-2003; 2003WO-US030353.  
XX PR 25-SEP-2002; 2002US-0413588P.  
XX PA (PHAA ) PHARMACIA CORP.  
XX PI Kane CD;  
XX WPI; 2004-347928/32.  
XX New antisense oligonucleotides useful for modulating expression of  
XX Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,  
XX e.g. diabetes, immunological disorders, cardiovascular disorders,  
XX gallstones or obesity.  
XX Claim 4; SEQ ID NO 1012; 150pp; English.  
XX The invention relates to an antisense compound 8-30 nucleobases in length  
XX targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),  
XX where the antisense compound specifically hybridizes with and inhibits  
XX the expression of FXR. The composition and methods are useful for  
XX inhibiting the expression of FXR (Farnesoid X receptor) in cells or  
XX tissues, or for treating diseases or conditions associated with FXR, such  
XX as diabetes, immunological disorders, cardiovascular disorders, e.g.  
XX dyslipidemia and its symptoms, atherosclerosis, low HDL (high density  
XX lipoprotein), elevated LDL (low density lipoprotein) or  
XX hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,  
XX neurological disorders, or ischemia/reperfusion injury. In addition, the  
XX composition is used for diagnostics, prophylaxis, or as research reagents  
XX or kits. This sequence corresponds to an antisense oligonucleotide of the  
XX invention.  
XX Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 794 TTACGCTACATGACATTATC 813  
Db 1 TTACTCTCCATGACATCAGC 20

RESULT 2062  
ADP18306  
ID ADP18306 standard; DNA; 20 BP.  
XX  
AC ADP18306;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE STEAP gene antisense primer seqid 48.  
XX  
KW cytostatic; senescence; cell proliferation; neoplastic cell growth;  
KW cellular gene expression; reverse transcriptase PCR; RT-PCR; primer; ss;  
KW doxorubicin-induced senescence; HCT 116 cell; human.  
XX  
OS Homo sapiens.  
XX  
PN US2004058320-A1.  
XX  
PD 25-MAR-2004.  
XX  
PF 21-DEC-2001; 2001US-00032264.  
XX  
PR 21-DEC-2000; 2000US-0257907P.  
PR 17-DEC-2001; 2001US-0341425P.  
XX  
PA (RONI/) RONINSON I B.  
PA (CHAN/) CHANG B.  
XX  
PI Roninsson IB, Chang B;  
XX  
DR WPI; 2004-294237/27.  
XX  
PT Identifying a compound that induces senescence in a mammalian cell,  
PT useful for treating abnormal cell proliferation, comprises assaying  
PT expression of a cellular gene in the cell in the presence and in the  
PT absence of a compound.

XX Example 2; SEQ ID NO 48; 29pp; English.

XX The invention describes a method of identifying a compound that induces  
XX senescence in a mammalian cell. The method comprises: culturing the  
XX mammalian cell in the presence and absence of the compound; assaying  
XX expression of at least one cellular gene selected from 73 genes given in  
XX the specification, in the cell in the presence and in the absence of the  
XX compound; and identifying compounds that induce senescence when  
XX expression of at least one of the cellular gene is higher in the presence  
XX of the compound than in the absence of the compound. Also described are:  
XX a compound that induces senescence in a mammalian cell identified from  
XX the method above; assessing efficacy of a treatment of a disease or  
XX condition relating to abnormal cell proliferation or neoplastic cell  
XX growth; and identifying a compound that inhibits senescence-associated  
XX induction of cellular gene expression. Compounds that induce senescence  
XX in abnormally proliferating or neoplastic cells are useful for treating a  
XX disease or condition relating to abnormal cell proliferation or  
XX neoplastic cell growth. This sequence represents a reverse transcriptase  
XX PCR primer used to identify genes induced and repressed following  
XX doxorubicin-induced senescence of HCT 116 cells.

XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 48 ACCAGCAGTGTGACTGCTGA 67  
Db 1 ACCATGAGTGTGATGCTGA 20

RESULT 2063  
ADO56095/c  
ID ADO56095 standard; DNA; 20 BP.  
XX  
AC ADO56095;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Cyclin-dependent kinase 6, antisense oligonucleotide #159.  
XX  
KW antisense therapy; cyclin-dependent kinase 6;  
KW hyperproliferative disorder; cancer; bacterial infection;  
KW viral infection; apoptosis; ss; probe; human.  
XX

OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
PH modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone. All cytidines are 5-  
FT methylcytidines."  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
XX  
PN US2004087523-A1.  
XX  
PD 06-MAY-2004.  
XX  
PF 31-JUL-2002; 2002US-00210802.  
XX  
PR 31-JUL-2002; 2002US-00210802.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Dobie KW;  
XX  
DR WPI; 2004-356241/33.

XX New compounds, particularly antisense oligonucleotides targeted to a  
XX nucleic acid encoding cyclin-dependent kinase 6, useful for treating  
XX cancer, bacterial/viral infection or conditions involving aberrant  
XX apoptosis.  
XX  
XX Example 15; Page 31; 68pp; English.  
XX  
XX The invention relates to antisense oligonucleotides targeted to cyclin-  
XX dependent kinase 6, and which inhibit the expression of cyclin-dependent  
XX kinase 6. The antisense oligonucleotides are useful for treating a  
XX disease or condition associated with cyclin-dependent kinase 6, such as a  
XX hyperproliferative disorder (e.g. cancer), or conditions arising from  
XX bacterial or viral infections, or involving aberrant apoptosis. They are  
XX also useful in research and diagnostics for modulating the expression of  
XX cyclin-dependent kinase 6. The present sequence represents a cyclin-  
XX dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also  
XX used in the sequence listing but these sequences do not match seqid 15-  
XX 134 displayed in Tables 1 and 2 (page 30-34).

XX Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1084 GAGTGGTGACACTGTGGTA 1103

Db 20 GTGGTCGTCACCTGTGGTA 1

RESULT 2064

ADN89165/c

ID ADN89165 standard; DNA; 20 BP.

XX

AC ADN89165;

DT 29-JUL-2004 (first entry)

DE Human G-protein coupled receptor GPR43 gene forward PCR primer.

XX

KW ss; primer; antianemic; hemostatic; cardiant; antiarrhythmic;

KW antiarteriosclerotic; antiparkinsonian; nootropic; neuroprotective;

KW cerebroprotective; vasotropic; antiasthmatic; anti-inflammatory;

KW dermatological; immunosuppressive; muscular; antidiabetic; antirheumatic;

KW antiarthritic; antipsoriatic; uropathic; cardiovascular; CNS;

KW gastrointestinal; cytostatic; gene therapy;

KW G protein-coupled receptor 43; GPR43; hematological disease;

KW cardiovascular disease; peripheral nervous system disorder;

KW central nervous system disorder; gastroenterological disease;

KW inflammation; cancer; urological disease; anemia;

KW myeloproliferative disorder; hemorrhagic disorder; leukemia;

KW myocardial infarction; arrhythmia; atherosclerosis; Parkinson's disease;

KW dementia; multiple sclerosis; stroke; Alzheimer's disease;

KW Pick's disease; dysphagia; jaundice; intrahepatic cholestatis;

KW hepatomegaly; asthma; systemic lupus erythematosus; myasthenia gravis;

KW diabetes; rheumatoid arthritis; psoriasis; scleroderma;

KW urinary incontinence; erectile dysfunction; pelvic pain.

XX

OS Homo sapiens.

XX

PN WO2004038405-A2.

XX

PD 06-MAY-2004.

XX

PF 13-OCT-2003; 2003WO-EP011314.

XX

PR 25-OCT-2002; 2002EP-00023796.

XX

PA (FARB ) BAYER HEALTHCARE AG.

XX

PI Golz S, Brueggemeier U, Summer H;

XX

DR WPI; 2004-399994/37.

XX

PT Use of G protein-coupled receptor 43 polypeptide for diagnosing or

PT treating, e.g. anemia, leukemia, myocardial infarction, atherosclerosis,

PT multiple sclerosis, stroke, asthma, diabetes, or rheumatoid arthritis.

XX

PS Example 2; SEQ ID NO 3; 122pp; English.

XX

XX

CC The invention relates to the use of a G protein-coupled receptor 43

CC (GPR43) polypeptide for diagnosing or treating hematological diseases,

CC cardiovascular diseases, disorders of the peripheral and central nervous

CC system, gastroenterological diseases, inflammation, cancer diseases or

CC urological diseases. The GPR43 polypeptide is useful for diagnosing or

CC treating hematological diseases, cardiovascular diseases, disorders of

CC the peripheral and central nervous system, gastroenterological diseases,

CC inflammation, cancer diseases or urological diseases. Diseases include

CC anemia, myeloproliferative disorders, hemorrhagic disorders, leukemia,

CC myocardial infarction, arrhythmias, atherosclerosis, Parkinson's disease,

CC dementia, multiple sclerosis, stroke, Alzheimer's disease, Pick's

CC disease, dysphagia, jaundice, intrahepatic cholestatis, hepatomegaly,

CC asthma, systemic lupus erythematosus, myasthenia gravis, diabetes,

CC rheumatoid arthritis, psoriasis, scleroderma, urinary incontinence,

CC erectile dysfunction or pelvic pain. This sequence represents the forward

CC PCR primer to amplify the GPR43 gene of the invention.

XX

SQ Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 131 GGATGAAGAAGATCAACGG 150

Db 20 GGATGAAGAAGACACCAGG 1

RESULT 2065

ADO16592/c

ID ADO16592 standard; DNA; 20 BP.

XX

AC ADO16592;

DT 29-JUL-2004 (first entry)

XX

DE 4 synthesis-period of neuroblastoma related primer, SEQ ID 854.

XX

KW Human; 4 synthesis-period; neuroblastoma; stage 4S; primer; ss.

XX

OS Synthetic.

XX

PN WO2004039975-A1.

XX

PD 13-MAY-2004.

XX

PF 30-OCT-2003; 2003WO-JP013932.

XX

PR 30-OCT-2002; 2002JP-00316586.

XX

PA (HISM ) HISAMITSU PHARM CO LTD.

PA (CHIB-) CHIBA PREFECTURE.

XX

PI Nakagawara A, Ohira M;

XX

DR WPI; 2004-390323/36.

XX

PT Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma

PT cells useful for prognosing and determining progress stage of

PT neuroblastomas.

XX

PS Claim 8; SEQ ID NO 854; 455pp; Japanese.

XX

CC The present invention relates to human nucleic acid sequences (I;

CC ADO15739-ADO15912) obtained from 4 synthesis-period (stage 4S) of

CC neuroblastoma cell. (I) is useful for prognosing and determining the

CC progress stage of 4 synthesis-period of neuroblastoma. The present

CC sequence is a primer, used to illustrate the invention.

XX

SQ Sequence 20 BP; 1 A; 4 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 815 ACACGGAGAGTCCCTCACC 834

Db 20 ACACGGAGAGACCTCAAC 1

RESULT 2066

ADN30006

ID ADN30006 standard; DNA; 20 BP.

XX

AC ADN30006;

XX

DT 12-AUG-2004 (first entry)

XX

DE Human huntingtin interacting protein 2 DNA target region #17.

```
XX Human; huntingtin interacting protein 2; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; neurodegenerative disorder; neuroprotective.
XX
OS Homo sapiens.
XX
XX US2004102394-A1.
XX
XX 27-MAY-2004.
XX
XX 23-NOV-2002; 2002US-00303292.
XX
XX 23-NOV-2002; 2002US-00303292.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dean NM, Dobie KW;
XX
XX WPI; 2004-399724/37.
XX
XX New compound targeted to a nucleic acid molecule encoding huntingtin
XX interacting protein 2 and inhibits the expression of huntingtin
XX interacting protein 2, useful for modulating the expression of huntingtin
XX interacting protein 2.
XX
XX Example 15; SEQ ID NO 64; 35pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding human huntingtin interacting protein 2. The compound is an
XX antisense oligonucleotide that specifically hybridizes with the nucleic
XX acid and inhibits expression of the polypeptide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage
XX i.e. a phosphorothioate linkage, at least one modified sugar moiety,
XX preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
XX nucleobase comprising a 5-methylcytosine. The antisense compounds are
XX useful for modulating the expression of the human huntingtin interacting
XX protein 2 polypeptide and in preparation of a composition for treating
XX neurodegenerative disorders. This sequence represents an antisense
XX oligonucleotide target region of the invention.
XX
XX Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 582 CCTATCTGAGATTGGCTTTG 601
XX 1 CCTATGCTATGGGCTTTG 20
XX
XX RESULT 2067
XX ADN29980/c
XX ID ADN29980 standard; DNA; 20 BP.
XX
XX AC ADN29980;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human huntingtin interacting protein 2 DNA antisense oligonucleotide #28.
XX
XX Human; huntingtin interacting protein 2; ss; antisense oligonucleotide;
XX phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
XX 5-methylcytosine; neurodegenerative disorder; neuroprotective.
XX
XX Homo sapiens.
XX
XX US2004102394-A1.
XX
XX 27-MAY-2004.
XX
XX 23-NOV-2002; 2002US-00303292.
XX
XX PF
```

```
XX 23-NOV-2002; 2002US-00303292.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dean NM, Dobie KW;
XX
XX WPI; 2004-399724/37.
XX
XX New compound targeted to a nucleic acid molecule encoding huntingtin
XX interacting protein 2 and inhibits the expression of huntingtin
XX interacting protein 2, useful for modulating the expression of huntingtin
XX interacting protein 2.
XX
XX Example 15; SEQ ID NO 38; 35pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding human huntingtin interacting protein 2. The compound is an
XX antisense oligonucleotide that specifically hybridizes with the nucleic
XX acid and inhibits expression of the polypeptide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage
XX i.e. a phosphorothioate linkage, at least one modified sugar moiety,
XX preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
XX nucleobase comprising a 5-methylcytosine. The antisense compounds are
XX useful for modulating the expression of the human huntingtin interacting
XX protein 2 polypeptide and in preparation of a composition for treating
XX neurodegenerative disorders. This sequence represents an antisense
XX oligonucleotide targeted to DNA encoding the human huntingtin interacting
XX protein 2 of the invention.
XX
XX Sequence 20 BP; 8 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 582 CCTATCTGAGATTGGCTTTG 601
XX 20 CCTATGCTATGGGCTTTG 1
XX
XX RESULT 2068
XX ADN52162/c
XX ID ADN52162 standard; DNA; 20 BP.
XX
XX AC ADN52162;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human inhibitor of apoptosis-like antisense oligonucleotide segid 36.
XX
XX cytostatic; gene therapy; inhibitors of apoptosis-like; IAP-like;
XX IAP-like modulator; IAP-like associated disorder;
XX hyperproliferative disorder; human; antisense oligonucleotide;
XX antisense technology; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
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XX
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```

PN US2004102395-A1.
XX
XX
PD 27-MAY-2004.
XX
XX
FF 22-NOV-2002; 2002US-00303325.
XX
XX
PR 22-NOV-2002; 2002US-00303325.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Bennett CF, Dobie KW;
XX
XX
DR WPI; 2004-399725/37.
XX
XX
XX The invention describes a compound 8-80 nucleobases in length targeted to
CC a nucleic acid molecule encoding inhibitors of apoptosis (IAP)-like,
CC where the compound specifically hybridises with the nucleic acid molecule
CC encoding IAP-like comprising 16000 bp (SEQ ID NO. 4) and inhibits the
CC expression of IAP-like. Also described are: inhibiting the expression of
CC IAP-like in cells or tissues; screening for a modulator of IAP-like; a
CC diagnostic method for identifying a disease state comprising identifying
CC the presence of IAP-like in a sample using at least one of the primers
CC selected from 2 sequences comprising SEQ ID NO. 5 or 6, or the probe
CC comprising SEQ ID NO. 7; a kit or assay device comprising the compound;
CC and treating an animal having a disease or condition associated with IAP-
CC like. The compound is useful for modulating the expression of IAP-like.
CC It is also useful for diagnosing or treating diseases associated with
CC expression of IAP-like, e.g. a hyperproliferative disorder. This sequence
CC represents a human inhibitor of apoptosis (IAP)-like antisense
CC oligonucleotide.
XX
XX Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 304 GGGCCACTCAGCTCTGCACC 323
DB 20 GGCACACTGGGCTCTGCAGC 1

RESULT 2069
AD052236
ID AD052236 standard; DNA; 20 BP.
XX
XX AD052236;
AC
XX
XX 12-AUG-2004 (first entry)
XX
XX Human inhibitor of apoptosis-like antisense oligonucleotide seqid 112.
XX
XX cytostatic; gene therapy; inhibitors of apoptosis-like; IAP-like;
XX IAP-like modulator; IAP-like associated disorder;
XX hyperproliferative disorder; human; antisense oligonucleotide;
XX antisense technology; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5

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FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004102395-A1.
XX
XX 27-MAY-2004.
XX
XX 22-NOV-2002; 2002US-00303325.
XX
XX 22-NOV-2002; 2002US-00303325.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dobie KW;
XX
XX WPI; 2004-399725/37.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted to
CC a nucleic acid molecule encoding inhibitors of apoptosis (IAP)-like,
CC where the compound specifically hybridises with the nucleic acid molecule
CC encoding IAP-like comprising 16000 bp (SEQ ID NO. 4) and inhibits the
CC expression of IAP-like. Also described are: inhibiting the expression of
CC IAP-like in cells or tissues; screening for a modulator of IAP-like; a
CC diagnostic method for identifying a disease state comprising identifying
CC the presence of IAP-like in a sample using at least one of the primers
CC selected from 2 sequences comprising SEQ ID NO. 5 or 6, or the probe
CC comprising SEQ ID NO. 7; a kit or assay device comprising the compound;
CC and treating an animal having a disease or condition associated with IAP-
CC like. The compound is useful for modulating the expression of IAP-like.
CC It is also useful for diagnosing or treating diseases associated with
CC expression of IAP-like, e.g. a hyperproliferative disorder. This sequence
CC represents a human inhibitor of apoptosis (IAP)-like antisense
CC oligonucleotide.
XX
XX Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 304 GGGCCACTCAGCTCTGCACC 323
DB 1 GGCACACTGGGCTCTGCAGC 20

RESULT 2070
ADP74088
ID ADP74088 standard; DNA; 20 BP.
XX
XX ADP74088;
AC
XX
XX 12-AUG-2004 (first entry)
XX
XX RT-PCR primer for amplifying murine PPAR(gamma) cDNA Seq 78.
XX
XX RT-PCR; mouse; murine; primer; ss; Mm28913; immunoregulation;
XX immunity balance; Th1 helper T cell; Th2 helper T cell; C/EBP (alpha);
XX GATA-4; Notch-4; IRS-4; placental Ca2+ binding protein; CD6; Galactin-3;
XX CD97; DECI; Onzin; GBP3; CD49b; CD29; BMP-10; integrin(beta)7; PCSK3;
XX GP49A; CTLA-2(alpha); TDAGS1; CD53; laminin(alpha)5; PPAR(gamma); BCM1;
XX CRABP2; CYP11A(P450scc); 20(alpha)-hydroxysteroid dehydrogenase;

```

KW 20-alpha-HSD; CCR2; PCR.  
 XX Mus sp.  
 OS JP2004147534-A.  
 PN 27-MAY-2004.  
 PD  
 XX 29-OCT-2002; 2002JP-00314957.  
 XX 29-OCT-2002; 2002JP-00314957.  
 PR  
 XX (NISHI) NISHIMURA T.  
 XX (TORA) TORAY IND INC.  
 PA  
 XX WPI; 2004-434540/41.  
 DR  
 XX Novel Mm28913 and Mm20021 nucleic acid sequences encoding protein with  
 PT immunoregulation activity, useful for evaluating ratio of Th1/Th2 helper  
 PT T cells.  
 PS Example 6; SEQ ID NO 78; 140pp; Japanese.  
 XX  
 CC This invention relates to a novel gene identified as Mm28913 and the  
 CC encoded protein thereof that is involved in immunoregulation activity.  
 CC Specifically, it refers to a method to test for the immunity balance or  
 CC ratio between Th1 and Th2 helper T cells. The present invention describes  
 CC the target helper T cell proteins that are activated or suppressed by  
 CC Th1/Th2, and include the Th1 targets C/EBP (alpha), GATA-4, Notch-4, IRS-  
 CC 4, placental Ca2+ binding protein, CD6, Galactin-3, CD97, DEC1, Onzin,  
 CC GSP3, CD49b, CD29 and BMP-10, whereas the functional molecules of the Th2  
 CC lymphocyte include integrin(beta)7, PCSK3, GP49A, CTLA-2(alpha), TDAG51,  
 CC CD53, laminin(alpha)5, PPAR(gamma), ECM1, CRABP2, CYP11A(P450scc),  
 CC 20(alpha)-hydroxysteroid dehydrogenase (20-alpha-HSD) and CCR2.  
 CC Accordingly, the method further involves using the gene of the functional  
 CC molecule of helper T cell, a gene product, an antibody of the gene  
 CC product and at least one of the cells transduced with the gene as an  
 CC index to evaluate the Th1/Th2 ratio. This oligonucleotide sequence is an  
 CC RT-PCR primer used to amplify the murine cDNA sequence of a Th2 helper T  
 CC cell functional molecule of the invention.  
 XX  
 SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1702 TCTCTGCTACCTGCTGAG 1721  
 DB 1 TCTGTGAGGATCTGCTGAG 20  
 RESULT 2071  
 ADP79132  
 ID ADP79132 standard; DNA; 20 BP.  
 XX  
 AC ADP79132;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Chimeric phosphorothioate oligonucleotide #2931.  
 XX  
 KW GPAT; Antidiabetic; Cardiant;  
 KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;  
 KW reperfusion; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..4  
 FT /\*tag= a  
 FT /mod\_base= other  
 FT /note= "2-methoxyethyl wing"  
 FT

FT modified\_base 17..20  
 FT /\*tag= b  
 FT /mod\_base= other  
 FT /note= "2-methoxyethyl wing"  
 XX  
 PN WO2004035763-A2.  
 XX  
 XX 29-APR-2004.  
 PD  
 XX 02-OCT-2003; 2003WO-US033332.  
 XX  
 XX 17-OCT-2002; 2002US-0419268P.  
 PR  
 XX (PHAA) PHARMACIA CORP.  
 PA  
 XX Broschat KO, Crosby SD;  
 XX  
 XX WPI; 2004-348453/32.  
 DR  
 XX New compounds, particularly antisense oligonucleotides targeted to a  
 PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase  
 PT (GPAT), for treating diabetes, a cardiovascular or neurologic disorder,  
 PT ischemia/reperfusion injury.  
 PS Claim 4; SEQ ID NO 2931; 175pp; English.  
 XX  
 CC The present invention relates to a compound which specifically hybridizes  
 CC with a nucleic acid molecule encoding GPAT, and inhibits the expression  
 CC of GPAT. Specifically claimed are antisense oligonucleotides capable of  
 CC modulating the expression of GPAT, and which comprise any of the 3063  
 CC sequences of 20 base pairs, given in the specification. The compound,  
 CC composition and methods are useful for treating a disease or condition  
 CC associated with GPAT, such as a disease or condition, e.g. diabetes, a  
 CC cardiovascular or neurological disorder, ischemia/reperfusion injury.  
 CC They are also useful in research and diagnostics for modulating the  
 CC expression of GPAT. The present sequence represents a chimeric  
 CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these  
 CC oligonucleotides inhibit human GPAT expression.  
 XX  
 SQ Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 881 ACTGTGGACATCATCAAC 900  
 DB 1 ACTGTGGACATCATCATC 20  
 RESULT 2072  
 ADP77712  
 ID ADP77712 standard; DNA; 20 BP.  
 XX  
 AC ADP77712;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Chimeric phosphorothioate oligonucleotide #1511.  
 XX  
 KW GPAT; Antidiabetic; Cardiant;  
 KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;  
 KW reperfusion; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..4  
 FT /\*tag= a  
 FT /mod\_base= other  
 FT /note= "2-methoxyethyl wing"  
 FT modified\_base 17..20  
 FT /\*tag= b  
 FT

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XX      /mod_base= other
FT      /note= "2-methoxyethyl wing"
XX
PN      WO2004035763-A2.
XX
PD      29-APR-2004.
XX
XX      02-OCT-2003; 2003WO-US033332.
XX
XX      17-OCT-2002; 2002US-0419268P.
XX
XX      (PHAA ) PHARMACIA CORP.
XX
XX      Broschat KO, Crosby SD;
XX      WPI; 2004-348453/32.
XX
XX      New compounds, particularly antisense oligonucleotides targeted to a
XX      nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX      (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX      ischemia/reperfusion injury.
XX
XX      Claim 4; SEQ ID NO 1511; 175pp; English.
XX
XX      The present invention relates to a compound which specifically hybridizes
XX      with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX      of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX      modulating the expression of GFAT, and which comprise any of the 3063
XX      sequences of 20 base pairs, given in the specification. The compound,
XX      composition and methods are useful for treating a disease or condition
XX      associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX      cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX      They are also useful in research and diagnostics for modulating the
XX      expression of GFAT. The present sequence represents a chimeric
XX      phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX      oligonucleotides inhibit human GFAT expression.
XX
XX      Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.6; DB 1; Length 20;
XX      Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX      Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX      QY      1065 AACAAAGACATACCTCCAATG 1084
XX      1 ACGAAGTATATCTCCACTG 20
XX
XX      Db
XX
XX      RESULT 2073
XX      ADP76327
XX      ID      ADP76327 standard; DNA; 20 BP.
XX
XX      AC      ADP76327;
XX
XX      DT      12-AUG-2004 (first entry)
XX
XX      DE      Chimeric phosphorothioate oligonucleotide #126.
XX
XX      KW      GFAT; Antidiabetic; Cardiant;
XX      KW      Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX      KW      reperfusion; ss.
XX
XX      OS      Synthetic.
XX
XX      FH      Key      Location/Qualifiers
XX      modified_base 1..4
XX      FT      /*tag= a
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XX      FT      modified_base 17..20
XX      FT      /*tag= b
XX      FT      /mod_base= other
XX      FT      /note= "2-methoxyethyl wing"
XX

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XX      WO2004035763-A2.
XX
XX      29-APR-2004.
XX
XX      02-OCT-2003; 2003WO-US033332.
XX
XX      17-OCT-2002; 2002US-0419268P.
XX
XX      (PHAA ) PHARMACIA CORP.
XX
XX      Broschat KO, Crosby SD;
XX      WPI; 2004-348453/32.
XX
XX      New compounds, particularly antisense oligonucleotides targeted to a
XX      nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX      (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX      ischemia/reperfusion injury.
XX
XX      Claim 4; SEQ ID NO 126; 175pp; English.
XX
XX      The present invention relates to a compound which specifically hybridizes
XX      with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX      of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX      modulating the expression of GFAT, and which comprise any of the 3063
XX      sequences of 20 base pairs, given in the specification. The compound,
XX      composition and methods are useful for treating a disease or condition
XX      associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX      cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX      They are also useful in research and diagnostics for modulating the
XX      expression of GFAT. The present sequence represents a chimeric
XX      phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX      oligonucleotides inhibit human GFAT expression.
XX
XX      Sequence 20 BP; 3 A; 4 C; 10 G; 3 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.6; DB 1; Length 20;
XX      Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX      Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX      QY      224 ATCAGAGTGGTGGTGGC 243
XX      1 ATCAGAGCGCTGGGGTGGC 20
XX
XX      Db
XX
XX      RESULT 2074
XX      ADP77744
XX      ID      ADP77744 standard; DNA; 20 BP.
XX
XX      AC      ADP77744;
XX
XX      DT      12-AUG-2004 (first entry)
XX
XX      DE      Chimeric phosphorothioate oligonucleotide #1543.
XX
XX      KW      GFAT; Antidiabetic; Cardiant;
XX      KW      Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX      KW      reperfusion; ss.
XX
XX      OS      Synthetic.
XX
XX      FH      Key      Location/Qualifiers
XX      modified_base 1..4
XX      FT      /*tag= a
XX      FT      /mod_base= other
XX      FT      /note= "2-methoxyethyl wing"
XX      FT      modified_base 17..20
XX      FT      /*tag= b
XX      FT      /mod_base= other
XX      FT      /note= "2-methoxyethyl wing"
XX
XX      WO2004035763-A2.

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XX PD 29-APR-2004.
XX PF
XX XX
XX XX 02-OCT-2003; 2003WO-US033332.
XX PR
XX XX 17-OCT-2002; 2002US-0419268P.
XX PR
XX XX (PHAA ) PHARMACIA CORP.
XX PA
XX PI Broschat KO, Crosby SD;
XX XX WPI; 2004-348453/32.
XX DR
XX XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX XX
XX PS Claim 4; SEQ ID NO 1543; 175pp; English.
XX XX
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX XX
XX SQ Sequence 20 BP; 6 A; 9 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1184 AGATGGCCACAGCGCGTCCC 1203
Db 1 AATATTACCACAGCGCGCCCC 20
RESULT 2075
ADP76938
ID ADP76938 standard; DNA; 20 BP.
XX AC
XX AC ADP76938;
XX DT
XX DT 12-AUG-2004 (first entry)
XX XX
XX XX Chimeric phosphorothioate oligonucleotide #737.
XX DE
XX DE GFAT; Antidiabetic; Cardiant;
XX KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX KW reperfusion; ss.
XX OS Synthetic.
XX OS
XX FH Key Location/Qualifiers
XX FT modified_base 1..4
XX FT /*tag= a
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX FT modified_base 17..20
XX FT /*tag= b
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX PN WO2004035763-A2.
XX XX
XX PD 29-APR-2004.
```

```
XX XX 02-OCT-2003; 2003WO-US033332.
XX PF
XX XX
XX PR 17-OCT-2002; 2002US-0419268P.
XX XX
XX XX (PHAA ) PHARMACIA CORP.
XX XX
XX PI Broschat KO, Crosby SD;
XX XX WPI; 2004-348453/32.
XX XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX XX
XX PS Claim 4; SEQ ID NO 737; 175pp; English.
XX XX
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX XX
XX SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1145 CTCAGATTGACATGTGGGGT 1164
Db 1 CTCAGATTGATGGAGGGT 20
RESULT 2076
ADP77889
ID ADP77889 standard; DNA; 20 BP.
XX AC
XX AC ADP77889;
XX DT
XX DT 12-AUG-2004 (first entry)
XX XX
XX XX Chimeric phosphorothioate oligonucleotide #1688.
XX XX
XX KW GFAT; Antidiabetic; Cardiant;
XX KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX KW reperfusion; ss.
XX OS Synthetic.
XX OS
XX FH Key Location/Qualifiers
XX FT modified_base 1..4
XX FT /*tag= a
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX FT modified_base 17..20
XX FT /*tag= b
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX PN WO2004035763-A2.
XX XX
XX PD 29-APR-2004.
XX PF 02-OCT-2003; 2003WO-US033332.
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XX 17-OCT-2002; 2002US-0419268P.
XX (PHAA ) PHARMACIA CORP.
XX PI Broschat KO, Crosby SD;
XX DR WPI; 2004-348453/32.
XX DR WPI; 2004-348453/32.
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX PS Claim 4; SEQ ID NO 168; 175pp; English.
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX SQ Sequence 20 BP; 8 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 889 AACATCATCAACATGCACAA 908
DB 1 AACATCATCATCTTCAGAA 20
|||||
RESULT 2077
ADP76369/c
ID ADP76369 standard; DNA; 20 BP.
XX AC ADP76369;
XX DT 12-AUG-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide #168.
XX KW GFAT; Antidiabetic; Cardiant;
XX KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX KW reperfusion; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..4
XX FT /tag= a
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX FT modified_base 17..20
XX FT /tag= b
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX PN WO2004035763-A2.
XX PD 29-APR-2004.
XX PF 02-OCT-2003; 2003WO-US03332.
XX XX
XX PR 17-OCT-2002; 2002US-0419268P.
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XX (PHAA ) PHARMACIA CORP.
XX PI Broschat KO, Crosby SD;
XX DR WPI; 2004-348453/32.
XX DR WPI; 2004-348453/32.
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX PS Claim 4; SEQ ID NO 168; 175pp; English.
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 126 GCATCGATGAAGAAGATCA 145
DB 20 GCATCGATGAAGAAGTTCA 1
|||||
RESULT 2078
ADP11969/c
ID ADP11969 standard; DNA; 20 BP.
XX AC ADP11969;
XX DT 12-AUG-2004 (first entry)
XX DE Set 2 right PCR primer for marker probe #75.
XX KW transplant rejection; immune system; rheumatoid arthritis; lupus;
XX KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX OS Homo sapiens.
XX PN WO2004042346-A2.
XX PD 21-MAY-2004.
XX PF 24-APR-2003; 2003WO-US012946.
XX PR 24-APR-2002; 2002US-00131831.
XX PR 20-DEC-2002; 2002US-00325899.
XX PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX PI Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX PI Rosenberg S;
XX DR WPI; 2004-400724/37.
XX PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX PT rejection, in an individual, comprises detecting the expression level of
XX PT the genes.
```



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SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
  Query Match      0.8%; Score 13.6; DB 1; Length 20;
  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 344 TGAAGATGGGCTCTGATGGG 363
Db 20 TGAATGGATCTGAGGG 1

RESULT 2081
ADN48571/c
ID ADN48571 standard; DNA; 20 BP.
XX AC
XX AC ADN48571;
XX DT 12-AUG-2004 (first entry)
XX DE
XX DE Human Notch3 DNA antisense oligonucleotide #15.
XX KW Human; Notch3; ss; antisense oligonucleotide; phosphorothioate linkage;
XX KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
XX KW hyperproliferative disorder; cancer; cytostatic.
XX OS Homo sapiens.
XX PN US2004102390-A1.
XX PD 27-MAY-2004.
XX PF 21-NOV-2002; 2002US-00301832.
XX PR 21-NOV-2002; 2002US-00301832.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Dobie KW;
XX DR WPI; 2004-399720/37.
XX PT New compounds, particularly oligonucleotides targeted to a nucleic acid
XX PT encoding Notch3, useful for treating diseases associated with Notch3,
XX PT e.g. hyperproliferative disorders.
XX PS Example 15; SEQ ID NO 103; 74pp; English.
XX CC The invention relates to a compound targeted to a nucleic acid molecule
XX CC encoding the human Notch3 polypeptide. The compound is an antisense
XX CC oligonucleotide that specifically hybridises with the nucleic acid and
XX CC inhibits expression of the polypeptide. The antisense oligonucleotide
XX CC comprises at least one modified internucleoside linkage i.e. a
XX CC phosphorothioate linkage, at least one modified sugar moiety, preferably
XX CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
XX CC comprising a 5-methylcytosine. The antisense compounds are useful for
XX CC modulating the expression of the human Notch3 polypeptide and in
XX CC preparation of a composition for treating hyperproliferative disorders,
XX CC e.g. cancer. This sequence represents a human Notch3 DNA antisense
XX CC oligonucleotide of the invention.
SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
  Query Match      0.8%; Score 13.6; DB 1; Length 20;
  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 547 GACAGCCCTCAGCCGCG 566
Db 20 GACAGTACCTCTGCCGCTG 1

RESULT 2082
ADN48648
ID ADN48648 standard; DNA; 20 BP.
XX AC
XX AC ADN48648;
XX DT 12-AUG-2004 (first entry)
XX DE
XX DE Human Notch3 DNA antisense oligonucleotide target region #14.
XX KW Human; Notch3; ss; antisense oligonucleotide; phosphorothioate linkage;
XX KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
XX KW hyperproliferative disorder; cancer; cytostatic.
XX OS Homo sapiens.
XX PN US2004102390-A1.
XX PD 27-MAY-2004.
XX PF 21-NOV-2002; 2002US-00301832.
XX PR 21-NOV-2002; 2002US-00301832.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Dobie KW;
XX DR WPI; 2004-399720/37.
XX PT New compounds, particularly oligonucleotides targeted to a nucleic acid
XX PT encoding Notch3, useful for treating diseases associated with Notch3,
XX PT e.g. hyperproliferative disorders.
XX PS Example 15; SEQ ID NO 103; 74pp; English.
XX CC The invention relates to a compound targeted to a nucleic acid molecule
XX CC encoding the human Notch3 polypeptide. The compound is an antisense
XX CC oligonucleotide that specifically hybridises with the nucleic acid and
XX CC inhibits expression of the polypeptide. The antisense oligonucleotide
XX CC comprises at least one modified internucleoside linkage i.e. a
XX CC phosphorothioate linkage, at least one modified sugar moiety, preferably
XX CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
XX CC comprising a 5-methylcytosine. The antisense compounds are useful for
XX CC modulating the expression of the human Notch3 polypeptide and in
XX CC preparation of a composition for treating hyperproliferative disorders,
XX CC e.g. cancer. This sequence represents a human Notch3 DNA antisense
XX CC oligonucleotide of the invention.
SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
  Query Match      0.8%; Score 13.6; DB 1; Length 20;
  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 547 GACAGCCCTCAGCCGCG 566
Db 20 GACAGTACCTCTGCCGCTG 1

RESULT 2083
ADO32604/c
ID ADO32604 standard; DNA; 20 BP.
XX AC
XX AC ADO32604;
XX DT 12-AUG-2004 (first entry)
XX DE
XX DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 52.
XX KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
XX KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

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Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
phosphorothioate backbone; human; chromosome 2p23-3p24; ss.  
Homo sapiens.  
XX  
OS  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
16-20 2'-MOE wing bases, all cytidine residues are 5-  
methycytidines"  
XX  
PN WO2004044181-A2.  
XX  
XX  
PD 27-MAY-2004.  
XX  
XX  
PF 13-NOV-2003; 2003WO-US036411.  
XX  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
PR 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
encoding human apolipoprotein B, useful for treating hyperlipidemia,  
diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
syndrome.  
XX  
XX Example 15; SEQ ID NO 52; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
hybridises to and inhibits expression of mRNA encoding human  
apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
confluent HepG2 cells in culture at a concentration of 150 nM. The  
compound of the invention demonstrates cardiovascular,  
antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,  
vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
endocrine, vasotropic, neuroprotective and nootropic activities and may  
be useful for inhibiting the expression of apolipoprotein B in cells or  
tissues in vivo in order to address a condition associated with abnormal  
lipid or cholesterol metabolism. The compound may be useful for  
decreasing circulating lipoprotein levels, triglyceride levels,  
cholesterol levels, lipid levels, fatty acid levels, acute phase  
reactants and chylomicrons and thus may be utilised during treatment of  
hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
impotence, obstructive liver disease, Alzheimer's disease, dementia, of an  
diabetes, obesity and atherosclerosis. The current sequence is that of an  
antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
targeted to human ApoB RNA.  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1565 TGCTTGACTCAGGAGGCCA 1584  
DB 20 TACCTGTCTCTGTAGGCCA 1

RESULT 2084  
ADO55789/c  
ID ADO55789 standard; DNA; 20 BP.  
XX  
AC ADO55789;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
XX Human NIMA-related kinase 6 DNA, antisense oligonucleotide #12.  
XX  
XX Antisense therapy; human; NIMA-related kinase 6;  
never in mitosis gene a-related kinase 6; hyperproliferative disorder;  
cancer; cytostatic; phosphorothioate; ss.  
XX  
OS Homo sapiens.  
XX  
XX FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "This oligonucleotide has a phosphorothioate  
backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',  
and 3' ends, which are 5 nucleotides in length at each  
end. All cytidine residues are 5-methylcytidines"  
XX  
XX US2004097441-A1.  
XX  
XX 20-MAY-2004.  
XX  
XX 16-NOV-2002; 2002US-00295471.  
XX  
XX 16-NOV-2002; 2002US-00295471.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Dobie KW;  
XX  
XX WPI; 2004-389184/36.  
XX  
XX New antisense oligonucleotides for modulating never in mitosis, gene a  
(NIMA)-related kinase 6 expression, useful for diagnosing, preventing or  
treating diseases associated with the kinase, e.g. hyperproliferative  
disorders.  
XX  
XX Example 15; SEQ ID NO 26; 51pp; English.  
XX  
XX The present invention relates to antisense compounds targeted to a  
nucleic acid encoding human never in mitosis gene a-related kinase 6  
(NIMA-related kinase 6). The antisense compound comprises an antisense  
oligonucleotide that specifically hybridises with the nucleic acid and  
inhibits the expression of NIMA-related kinase 6. The antisense  
oligonucleotide is a chimeric oligonucleotide. The antisense  
oligonucleotide comprises at least one modified internucleoside linkage,  
preferably a phosphorothioate linkage. It also comprises at least one  
modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar  
moiety. The antisense oligonucleotide further comprises at least one  
modified nucleobase, preferably a 5-methylcytosine. The antisense  
oligonucleotides are useful for the treatment of diseases such as  
hyperproliferative disorders, e.g. cancer. The present sequence  
represents an antisense oligonucleotide used in the examples of the  
present invention.  
XX  
SQ Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 17 GATGCAGCAGGAATGCAGAGG 36  
DB 20 GCTGCAGCAGGAGACAGTGG 1



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RESULT 2085
AD055856
ID ADO55856 standard; DNA; 20 BP.
XX
AC ADO55856;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human NIMA-related kinase 6 DNA target sequence #10.
XX
DE Antisense therapy; human; NIMA-related kinase 6;
XX never in mitosis gene a-related kinase 6; hyperproliferative disorder;
XX cancer; cytostatic; ds.
XX
OS Homo sapiens.
XX
XX US2004097441-A1.
XX
XX 20-MAY-2004.
XX
XX 16-NOV-2002; 2002US-00295471.
XX
XX 16-NOV-2002; 2002US-00295471.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-389184/36.
XX
XX New antisense oligonucleotides for modulating never in mitosis, gene a
XX (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
XX treating diseases associated with the kinase, e.g. hyperproliferative
XX disorders.
XX
XX Example 15; SEQ ID NO 102; 51pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human never in mitosis gene a-related kinase 6
XX (NIMA-related kinase 6). The antisense compound comprises an antisense
XX oligonucleotide that specifically hybridises with the nucleic acid and
XX inhibits the expression of NIMA-related kinase 6. The antisense
XX oligonucleotide is a chimeric oligonucleotide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage,
XX preferably a phosphorothioate linkage. It also comprises at least one
XX modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
XX moiety. The antisense oligonucleotide further comprises at least one
XX modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer. The present sequence
XX represents a human NIMA-related kinase 6 DNA target sequence for an
XX antisense oligonucleotide.
XX
XX Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 17 GATGACAGGAGTGCAGAGG 36
Db 1 GCTGGACAGGAAGACAGTGG 20

RESULT 2086
ADP27221/c
ID ADP27221 standard; DNA; 20 BP.
XX
AC ADP27221;
XX
XX 26-AUG-2004 (first entry)
XX
XX Rat matrix metalloproteinase 11 DNA antisense oligonucleotide #52.

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XX
XX Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
XX phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
XX 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
XX Rattus norvegicus.
XX
XX US2004110152-A1.
XX
XX 10-JUN-2004.
XX
XX 10-DEC-2002; 2002US-00316755.
XX
XX 10-DEC-2002; 2002US-00316755.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM;
XX
XX WPI; 2004-440341/41.
XX
XX New oligonucleotide compound that inhibits expression of matrix
XX metalloproteinase 11, useful for preparing a composition for treating
XX hyperproliferative disorder, e.g., cancer.
XX
XX Example 16; SEQ ID NO 147; 76pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
XX is an antisense oligonucleotide that specifically hybridises with the
XX nucleic acid and inhibits expression of the polypeptide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage
XX i.e. a phosphorothioate linkage, at least one modified sugar moiety,
XX preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
XX nucleobase comprising a 5-methylcytosine. The antisense compounds are
XX useful for modulating the expression of the MMP11 polypeptide and in
XX preparation of a composition for treating hyperproliferative disorders,
XX e.g. cancer. This sequence represents an antisense oligonucleotide
XX targeted to DNA encoding the rat MMP11 polypeptide of the invention.
XX
XX Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1452 TCCATTCTTCTCAGTCTGG 1471
Db 20 TCCATGCTGCTTGTCTGG 1

RESULT 2087
ADP95955
ID ADP95955 standard; DNA; 20 BP.
XX
AC ADP95955;
XX
XX 26-AUG-2004 (first entry)
XX
XX Human GAPDH primer #2.
XX
XX hematoietic cancer; wingless-related MMTV integration site 5a; Wnt5a;
XX Cytostatic; chronic myeloid; lymphoblast leukemia; lymphoma; ss;
XX primer.
XX
XX Homo sapiens.
XX
XX WO2004047757-A2.
XX
XX 10-JUN-2004.
XX
XX 20-NOV-2003; 2003WO-US037594.

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PR 21-NOV-2002; 2002US-0428549P.  
XX (UYMA-) UNIV MASSACHUSETTS.  
XX Jones SN, Liang H, Pihan G;  
XX WPI; 2004-441075/41.  
XX  
XX Diagnosing and/or treating hematopoietic cancers associated with a  
XX PT reduction in wingless-related WntV integration site 5a (Wnt5a) gene or  
XX PT protein activity, particularly in myeloid or lymphoblast leukemia,  
XX PT lymphoma and myeloma.  
XX  
XX Example 1; SEQ ID NO 6; 70pp; English.  
XX  
XX The present invention relates to determining whether a subject has, or is  
XX CC at risk of developing, a hematopoietic cancer associated with a reduction  
XX CC in wingless-related WntV integration site 5a (Wnt5a) gene expression or  
XX CC activity or protein activity. The methods and compositions of the present  
XX CC invention are useful for the diagnosis, prevention and/or treatment of  
XX CC diseases or conditions associated with aberrant expression or activity of  
XX CC the Wnt5a, such as hematopoietic cancers like acute and chronic myeloid  
XX CC or lymphoblast leukemia, lymphoma and/or myeloma. The present sequence  
XX CC represents a primer of the invention.  
XX  
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 621 TAAGCTGGACAAACTGGGCG 640  
DB 1 TGAGCTTGACAAAGTGTGCG 20  
RESULT 2088  
ADO55973  
ID ADO55973 standard; DNA; 20 BP.  
XX ADO55973;  
XX  
XX 26-AUG-2004 (first entry)  
XX Human tubulin alpha 2 gene PCR primer #1.  
XX  
XX Microarray; lab on-chip; human; ss; PCR; primer; tubulin alpha 2 gene.  
XX  
XX Homo sapiens.  
XX  
XX JP2004156925-A.  
XX  
XX 03-JUN-2004.  
XX  
XX 01-NOV-2002; 2002JP-00320184.  
XX  
XX 01-NOV-2002; 2002JP-00320184.  
XX  
XX (JAPS) JSR CORP.  
XX (OKUT-) OKUTECH KK.  
XX  
XX WPI; 2004-483351/46.  
XX  
XX Lab on-chip useful for separating and refining substances, comprises  
XX PT strip-shaped sheet with several cells containing sample flow path which  
XX PT connects sample inflow unit and sample draining unit through which sample  
XX PT drains out.  
XX  
XX Example 10; Page; 30pp; Japanese.  
XX  
XX The invention comprises a microarray (lab on-chip) consisting of a strip-  
XX CC shaped sheet with several cells containing a sample flow path which  
XX CC connects a sample inflow unit and sample draining unit. The microarray of

CC the invention is useful for separating and refining substances. The  
CC present DNA sequence represents a PCR primer for the human tubulin alpha  
CC 2 gene.  
XX  
XX Sequence 20 BP; 5 A; 6 C; 7 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1477 CGGATCCCAAACTTCTCTGA 1496  
DB 1 CGGATCCGCAAACTGGCGGA 20  
RESULT 2089  
ADP44524  
ID ADP44524 standard; DNA; 20 BP.  
XX  
XX ADP44524;  
XX  
XX 03-SEP-2004 (first entry)  
XX  
XX Human ABCC5 DNA antisense oligonucleotide target region #62.  
XX  
XX Human; ABCC5; ss; antisense oligonucleotide; phosphorothioate linkage;  
XX KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;  
XX KW hyperproliferative disorder; cancer; cytostatic.  
XX  
XX Homo sapiens.  
XX  
XX US2004115649-A1.  
XX  
XX 17-JUN-2004.  
XX  
XX 12-DEC-2002; 2002US-00319893.  
XX  
XX 12-DEC-2002; 2002US-00319893.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Dobie KW;  
XX  
XX WPI; 2004-449386/42.  
XX  
XX New oligonucleotide compound that inhibits expression of ABCC5, useful  
XX PT for preparing a composition for treating hyperproliferative disorder,  
XX PT e.g., cancer.  
XX  
XX Example 15; SEQ ID NO 150; 57pp; English.  
XX  
XX The invention relates to a compound targeted to a nucleic acid molecule  
XX CC encoding the human ABCC5 polypeptide. The compound is an antisense  
XX CC oligonucleotide that specifically hybridizes with the nucleic acid and  
XX CC inhibits expression of the polypeptide. The antisense oligonucleotide  
XX CC comprises at least one modified internucleoside linkage i.e. a  
XX CC phosphorothioate linkage, at least one modified sugar moiety, preferably  
XX CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase  
XX CC comprising a 5-methylcytosine. The antisense compounds are useful for  
XX CC modulating the expression of the human ABCC5 polypeptide and in  
XX CC preparation of a composition for treating hyperproliferative disorders,  
XX CC e.g. cancer. This sequence represents a human ABCC5 DNA antisense  
XX CC oligonucleotide target region of the invention.  
XX  
XX Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1381 GCCGACCTCTCCACCAAGCT 1400  
DB 1 GCCGACCTCCGAAGCAAACT 20

```

RESULT 2090
ADP44451/c
ID ADP44451 standard; DNA; 20 BP.
XX
AC ADP44451;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human ABCC5 DNA antisense oligonucleotide #67.
XX
KW Human; ABCC5; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW hyperproliferative disorder; cancer; cytostatic.
XX
OS Homo sapiens.
XX
FN US2004115649-A1.
XX
PD 17-JUN-2004.
XX
PF 12-DEC-2002; 2002US-00319893.
XX
PR 12-DEC-2002; 2002US-00319893.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
WPI; 2004-449386/42.
XX
New oligonucleotide compound that inhibits expression of ABCC5, useful
PT for preparing a composition for treating hyperproliferative disorder,
PT e.g., cancer.
XX
PS Example 15; SEQ ID NO 77; 57pp; English.
XX
The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human ABCC5 polypeptide. The compound is an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits expression of the polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense compounds are useful for
CC modulating the expression of the human ABCC5 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents an antisense oligonucleotide
CC targeted to DNA encoding the human ABCC5 polypeptide of the invention.
XX
SQ Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1381 GCCGACCTCTCCACCAAGCT 1400
Db 20 GCCGACCTCTCCGAGCAAACT 1
RESULT 2091
ADP68428
ID ADP68428 standard; DNA; 20 BP.
XX
AC ADP68428;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human STAT 6 antisense oligonucleotide ISIS153785.
XX
KW Human; ss; antisense; STAT 6;

```

---

```

KW signal transducer and activator of transcription; transcription factor;
KW rheumatoid arthritis; obesity; allergy; autoimmune disorder;
XX chromosome 12q13.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone and all cytidines are 5
FT -methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residue"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residue"
XX
PN US2004115634-A1.
XX
PD 17-JUN-2004.
XX
PF 11-DEC-2002; 2002US-00317391.
XX
PR 11-DEC-2002; 2002US-00317391.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Shanahan WR, Freier SM, Dobie KW;
XX
WPI; 2004-449375/42.
XX
New oligonucleotide compound that inhibits expression of STAT 6, useful
PT for preparing a composition for treating e.g. autoimmune disorders.
XX
PS Example 15; SEQ ID NO 35; 64pp; English.
XX
The invention relates to a compound (e.g. an antisense oligonucleotide),
CC having a sequence comprising 8-80 bp targeted to a nucleic acid encoding
CC STAT 6 (signal transducer and activator of transcription 6, a
CC transcription factor implicated in rheumatoid arthritis, obesity and
CC allergy), specifically hybridises with the nucleic acid encoding STAT 6
CC appearing as ADP68397 and inhibits expression of STAT 6. Also included
CC are a method of inhibiting the expression of STAT 6 in cells or tissues,
CC a method of screening for a modulator of STAT 6, a diagnostic method for
CC identifying a disease state, a kit or assay device comprising the
CC compound and a method of treating an animal having a disease or condition
CC associated with STAT 6. The oligonucleotide compound is useful for
CC preparing a composition for treating autoimmune disorder, rheumatoid
CC arthritis, allergy or obesity. The gene for STAT 6 is located on
CC chromosome 12q13. The present sequence is an antisense oligonucleotide
CC targeting STAT 6.
XX
SQ Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1560 GTCGATGCTGCTCAGGCA 1579
Db 1 GTCAGTGGCTGGCTCAGGCA 20
RESULT 2092
ADP68496/c
ID ADP68496 standard; cDNA; 20 BP.
XX
AC ADP68496;
XX

```

DT 09-SEP-2004 (first entry)  
 XX Human STAT 6 antisense target region #17.  
 DE  
 XX  
 KW Human; ss; antisense; STAT 6;  
 KW signal transducer and activator of transcription; transcription factor;  
 KW rheumatoid arthritis; obesity; allergy; autoimmune disorder;  
 KW chromosome 12q13.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 PN US2004115634-A1.  
 XX  
 PD 17-JUN-2004.  
 XX  
 XX 11-DEC-2002; 2002US-00317391.  
 XX  
 PR 11-DEC-2002; 2002US-00317391.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Shanahan WR, Freier SM, Dobie KW;  
 PI WPI; 2004-449375/42.  
 XX  
 DR New oligonucleotide compound that inhibits expression of STAT 6, useful  
 PT for preparing a composition for treating e.g. autoimmune disorders.  
 PT  
 XX  
 XX Example 15; SEQ ID NO 103; 64pp; English.  
 PS  
 XX The invention relates to a compound (e.g. an antisense oligonucleotide),  
 CC having a sequence comprising 8-80 bp targeted to a nucleic acid encoding  
 CC STAT 6 (signal transducer and activator of transcription 6, a  
 CC transcription factor implicated in rheumatoid arthritis, obesity and  
 CC allergy), specifically hybridises with the nucleic acid encoding STAT 6  
 CC appearing as ADP68397 and inhibits expression of STAT 6. Also included  
 CC are a method of inhibiting the expression of STAT 6 in cells or tissues,  
 CC a method of screening for a modulator of STAT 6; a diagnostic method for  
 CC identifying a disease state, a kit or assay device comprising the  
 CC compound and a method of treating an animal having a disease or condition  
 CC associated with STAT 6. The oligonucleotide compound is useful for  
 CC preparing a composition for treating autoimmune disorder, rheumatoid  
 CC arthritis, allergy or obesity. The gene for STAT 6 is located on  
 CC chromosome 12q13. The present sequence is a STAT 6 cDNA target sequence  
 CC for the antisense oligonucleotides of the invention.  
 XX  
 XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1560 GTCGATGCGCTGACTCAGGCA 1579  
 |||||  
 DB 20 GTCAGTGGCTGGCTCAGGCA 1  
 RESULT 2093  
 ADP66874  
 ID ADP66874 standard; DNA; 20 BP.  
 XX  
 XX ADP66874;  
 AC  
 XX 09-SEP-2004 (first entry)  
 DT  
 XX Mouse endothelial lipase antisense oligonucleotide seqid 130.  
 DE  
 XX  
 XX antisense therapy; endothelial lipase;  
 KW endothelial lipase associated disorder; cardiovascular disease; mouse;  
 KW antisense oligonucleotide; antisense technology; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX

FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
 FT are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 15..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 XX  
 PN US2004115653-A1.  
 XX  
 XX 17-JUN-2004.  
 XX  
 XX 12-DEC-2002; 2002US-00319915.  
 XX  
 PR 12-DEC-2002; 2002US-00319915.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Dobie KW;  
 PI WPI; 2004-449390/42.  
 DR  
 XX  
 XX New antisense oligonucleotides for modulating endothelial lipase  
 PT expression, useful for diagnosing, preventing or treating diseases  
 PT associated with aberrant endothelial lipase expression, e.g.  
 PT cardiovascular disease.  
 XX  
 PS Example 16; SEQ ID NO 130; 114pp; English.  
 XX  
 XX The invention describes a compound 8-80 nucleobases in length targeted to  
 CC a nucleic acid molecule encoding endothelial lipase. The compound  
 CC specifically hybridises with the nucleic acid molecule encoding  
 CC endothelial lipase (which comprises a sequence of 3927 bp fully defined  
 CC in the specification) and inhibits the expression of endothelial lipase.  
 CC Also described are: inhibiting the expression of endothelial lipase in  
 CC cells or tissues; screening for a modulator of endothelial lipase; a  
 CC diagnostic method for identifying a disease state; a kit or assay device  
 CC comprising the above compound; and treating an animal having a disease or  
 CC condition associated with endothelial lipase, comprising administering to  
 CC the animal a therapeutic or prophylactic amount of the compound so that  
 CC expression of endothelial lipase is inhibited. The antisense  
 CC oligonucleotide is useful for inhibiting the expression of endothelial  
 CC lipase in cells or tissues to prevent or treat diseases associated with  
 CC aberrant endothelial lipase expression, such as cardiovascular disease.  
 CC In addition, the compound is used for diagnostics, prophylaxis, or as  
 CC research reagents or kits. This sequence represents a mouse endothelial  
 CC lipase antisense oligonucleotide.  
 XX  
 XX Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.6; DB 1; Length 20;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 576 TGTGAGCGCTATCTGAGATTG 595  
 |||||  
 DB 1 TTTCACCATCTCTGAGATTG 20  
 RESULT 2094  
 ADP66995/C  
 ID ADP66995 standard; DNA; 20 BP.  
 XX  
 XX ADP66995;  
 AC  
 XX 09-SEP-2004 (first entry)  
 DT

XX Mouse endothelial lipase antisense oligonucleotide seqid 251.  
DE  
XX antisense therapy: endothelial lipase;  
KW endothelial lipase associated disorder; cardiovascular disease; mouse;  
KW antisense oligonucleotide; antisense technology; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= b  
FT /\*mod\_base= OTHER  
FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
FT are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /\*mod\_base= OTHER  
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 15..20  
FT /\*tag= c  
FT /\*mod\_base= OTHER  
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
XX  
PN US2004115653-A1.  
XX  
XX 17-JUN-2004.  
XX  
PD 12-DEC-2002; 2002US-00319915.  
PF  
XX 12-DEC-2002; 2002US-00319915.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Dobie KW;  
PI  
XX  
XX WPI; 2004-449390/42.  
DR  
XX  
XX New antisense oligonucleotides for modulating endothelial lipase  
PT expression, useful for diagnosing, preventing or treating diseases  
PT associated with aberrant endothelial lipase expression, e.g.  
PT cardiovascular disease.  
XX  
PS Example 16; SEQ ID NO 251; 114pp; English.  
XX  
XX The invention describes a compound 8-80 nucleobases in length targeted to  
CC a nucleic acid molecule encoding endothelial lipase. The compound  
CC specifically hybridizes with the nucleic acid molecule encoding  
CC endothelial lipase (which comprises a sequence of 3927 bp fully defined  
CC in the specification) and inhibits the expression of endothelial lipase.  
CC Also described are: inhibiting the expression of endothelial lipase in  
CC cells or tissues; screening for a modulator of endothelial lipase; a  
CC diagnostic method for identifying a disease state; a kit or assay device  
CC comprising the above compound; and treating an animal having a disease or  
CC condition associated with endothelial lipase, comprising administering to  
CC the animal a therapeutic or prophylactic amount of the compound so that  
CC expression of endothelial lipase is inhibited. The antisense  
CC oligonucleotide is useful for inhibiting the expression of endothelial  
CC lipase in cells or tissues to prevent or treat diseases associated with  
CC aberrant endothelial lipase expression, such as cardiovascular disease.  
CC In addition, the compound is used for diagnostics, prophylaxis, or as  
CC research reagents or kits. This sequence represents a mouse endothelial  
CC lipase antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 576 TGTACGCTATCTGAGATTG 595  
Db 20 TTTCACCATCTCTGAGATTG 1

RESULT 2095  
AAZ26102/c  
ID AAZ26102 standard; DNA; 21 BP.  
XX  
XX AAZ26102;  
AC  
XX  
DT 30-NOV-1999 (first entry)  
XX  
DE Human polymorphic region 291.  
XX  
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
KW graft versus host disease; malignant cell removal; bone marrow; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9841648-A2.  
PN  
XX  
PD 24-SEP-1998.  
XX  
PF 19-MAR-1998; 98WO-US005419.  
XX  
PR 20-MAR-1997; 97US-0041057P.  
XX  
XX (VARI-) VARIAGENICS INC.  
PA  
XX  
PI Housman D, Ledley FD, Stanton VP;  
XX  
XX WPI; 1998-521232/44.  
DR  
XX  
XX Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.  
XX  
PS Disclosure; Fig 7; 605pp; English.  
XX  
XX This invention describes a novel method for identifying an inhibitor  
CC potentially useful for treatment of cancer, where the inhibitor is active  
CC on a gene vital for cell growth or viability, and where the gene is  
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
CC used for preventing the development of cancer in a patient having a  
CC precancerous condition, by administering to the patient a first allele  
CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
CC present in cells of the precancerous condition, where the normal somatic  
CC cells of the patient are heterozygous for the first gene, the inhibitor  
CC is active on at least one but less than all allelic forms of the gene  
CC present in a population and targets only one allelic form present in the  
CC normal somatic cells, and the first gene. The products and methods can be  
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
CC graft versus host disease. The method can also be used to remove  
CC malignant cells from bone marrow transplants. AAZ25812-226825 represent  
CC human polymorphic sites described in the method of the invention  
XX  
SQ Sequence 21 BP; 1 A; 5 C; 10 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 21;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 1659 CACCCCTCACAGGCGAGCCC 1678  
Db 20 CACCACCTCACAGGCGAGCCC 1

RESULT 2096  
AAF97537

```

ID  AAF97537 standard; DNA; 21 BP.
XX
AC  AAF97537;
XX
DT  06-JUN-2001 (first entry)
XX
DE  Human gene single nucleotide polymorphism #2298.
XX
KW  Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW  polymorphism; vascular disease; coronary artery disease; forensics;
KW  myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW  pulmonary embolism; paternity test; ds.
XX
OS  Homo sapiens.
XX
FH  Key Location/Qualifiers
FT  Variation replace(11,G)
FT  /*tag= a
FT  /standard_name= "single nucleotide polymorphism"
XX
XX  WO200118250-A2.
XX
XX  15-MAR-2001.
XX
XX  07-SEP-2000; 2000WO-US024503.
XX
XX  10-SEP-1999; 99US-0153357P.
XX  26-JUL-2000; 2000US-0220947P.
XX  16-AUG-2000; 2000US-0225724P.
XX
XX  (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX  (MILL-) MILLENNIUM PHARM INC.
XX
XX  Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX  WPI; 2001-226749/23.
XX
XX  Nucleic acids comprising single nucleotide polymorphisms, useful in
XX  applications such as forensics, paternity testing, medicine, genetic
XX  analysis and phenotype correlations to diseases such as diabetes and
XX  atherosclerosis.
XX
XX  Example; Page 204; 242pp; English.
XX
XX  The present invention provides a method of diagnosing a vascular disease
XX  in an individual, involving determining the sequence at various
XX  polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX  genes. The sequences at a number of polymorphic sites are also provided
XX  in the specification. In particular, the method can be used in the
XX  diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX  disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX  pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX  useful in forensics, paternity testing, genetic analysis and phenotype
XX  correlations to diseases. The present sequence is an example of one of
XX  the human gene SNPs shown in the specification
XX
XX  Sequence 21 BP; 3 A; 6 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX  Query Match 0.8%; Score 13.6; DB 1; Length 21;
XX  Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX  Qy 1459 TTCCTCAGTCGCGGAGCG 1478
XX  1 TTCCTCAGCAGCGGAGGG 20
XX
XX  Db
XX
XX  RESULT 2097
XX  AAQ24934/C
XX  ID AAQ24934 standard; DNA; 15 BP.
XX
XX  AC AAQ24934;
XX

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DT  25-MAR-2003 (revised)
DT  19-NOV-1992 (first entry)
XX
XX  Synthetic primer (261).
DE
XX  Single primer amplification; SPAR; ss.
XX
XX  Synthetic.
OS
XX  WO9207948-A1.
XX  PD
XX  14-MAY-1992.
XX
XX  05-NOV-1991; 91WO-US008233.
XX
XX  06-NOV-1990; 90US-00610973.
XX  PR 29-JUL-1991; 91US-00737919.
XX
XX  (LUBR ) LUBRIZOL CORP.
XX
XX  Cardineau GA, Filner P;
XX  WPI; 1992-183683/22.
XX
XX  Nucleic acid sequence single primer amplification - useful for genomic
XX  variation analysis and polymorphism detection for restriction fragment
XX  length data.
XX
XX  Claim 16; Page 39; 65pp; English.
XX
XX  The selected primer is used in practice of the single primer
XX  amplification reaction (SPAR). (Updated on 25-MAR-2003 to correct PN
XX  field.)
XX
XX  Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX  Query Match 0.8%; Score 13.4; DB 1; Length 15;
XX  Best Local Similarity 93.3%; Pred. NO. 9.5e+02;
XX  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX  Qy 230 GTGCTGCTGCTGGCG 244
XX  15 GTGCTGCTGCTGGTG 1
XX
XX  Db
XX
XX  RESULT 2098
XX  AAT55034
XX  ID AAT55034 standard; RNA; 15 BP.
XX
XX  AC AAT55034;
XX
XX  25-MAR-2003 (revised)
XX  DT 18-APR-1997 (first entry)
XX
XX  Human relA hammerhead ribozyme target sequence (nt. position 631).
XX
XX  Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX  gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX  intercellular adhesion molecule; rel A; tumour necrosis factor;
XX  TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX  translocation; chronic myelogenous leukaemia; CML; cancer;
XX  Philadelphia chromosome; inflammation; autoimmune disease;
XX  atherosclerosis; myocardial infarction; stroke; restenosis;
XX  transplant rejection; rheumatoid arthritis; psoriasis;
XX  myocardial ischaemia; Kawasaki disease; septic shock; HIV;
XX  human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX  ss.
XX
XX  Homo sapiens.
XX
XX  WO9523225-A2.
XX
XX  31-AUG-1995.
XX

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XX PF 23-FEB-1995; 95WO-1B000156.
XX AC AAX75669/c
XX AC AAX75669;
XX AC AAX75669;
XX DT 28-JUL-1999 (first entry)
XX DE Human flt-1 and KDR hammerhead ribozyme target site #3.
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX OS Homo sapiens.
XX PN WO9715662-A2.
XX PD 01-MAY-1997.
XX PF 25-OCT-1996; 96WO-US017480.
XX PR 26-OCT-1995; 95US-0005974P.
XX PR 11-JAN-1996; 96US-00584040.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI (CHIR) CHIRON CORP.
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX PT rheumatoid arthritis, etc., in a human patient.
XX PS Example 9; Page 191; 218pp; English.
XX CC The present invention describes nucleic acid molecules which modulate the
XX CC synthesis, expression and/or stability of a mRNA encoding 1 or more
XX CC receptors of vascular endothelial growth factor (VEGF). A patient
XX CC (preferably human) having a condition associated with the level of the
XX CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX CC treated by administering the nucleic acid molecule or the expression
XX CC vector to the patient. AAX75752 represent specific examples
XX CC of nucleic acid molecules from the present invention
XX SQ Sequence 15 BP; 7 A; 1 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1501 ACTTCATATTGCA 1515
DB 15 ATTTCATATTGCA 1

RESULT 2100
AAV42654/c
ID AAV42654 standard; DNA; 15 BP.
XX AC AAV42654;
XX AC AAV42654;
XX DT 25-MAR-2003 (revised)
XX DT 16-OCT-1998 (first entry)
XX DE DNA sequence of the specification.
XX KW Hybridisation probe; differentiation; pathogenic; vaccine strain;

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KW cattle brucellosis; ss.  
 XX Synthetic.  
 OS  
 XX RU2095418-C1.  
 XX  
 XX 10-NOV-1997.  
 PD  
 XX  
 XX 01-JUL-1994; 94RU-00024845.  
 PF  
 XX  
 XX 01-JUL-1994; 94RU-00024845.  
 PR  
 XX  
 XX (KZVE-) KAZAN VETERINARY MED ACAD.  
 PA  
 XX  
 XX Faizov T Kh, Idrisov GZ, Mullakaev OT;  
 PI  
 XX  
 XX WPI; 1998-411609/35.  
 DR  
 XX  
 XX Differentiating pathogenic and vaccine strains of cattle brucellosis -  
 PT using restriction digestion with Nco 1 and transfer of the DNA fragments  
 to filters in an electric field.  
 PT  
 XX  
 XX Disclosure; Col 4; 4pp; Russian.  
 PS  
 XX  
 XX The present sequence appears in the specification, which describes a  
 CC hybridisation probe used to differentiate between pathogenic and vaccine  
 CC strains of cattle brucellosis. The method comprises digestion of DNA from  
 CC the test strain with restriction enzyme Nco 1, transfer of the fragments  
 CC obtained to filters, subsequent fixing of these onto the filters,  
 CC hybridisation with a labelled sample, and examination of the results.  
 CC (Updated on 25-MAR-2003 to correct PI field.)  
 CC  
 XX Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 230 GTGGTGGTGGTGGCG 244  
 |||||  
 DB 15 GTGGTGGTGGTGGTG 1

RESULT 2101  
 AAV42817/C  
 ID AAV42817 standard; DNA; 15 BP.  
 XX  
 XX AAV42817;  
 AC  
 XX 25-MAR-2003 (revised)  
 DT 16-OCT-1998 (first entry)  
 XX  
 XX Probe used to identify pathogenic and vaccine strains of brucellosis.  
 DE Hybridisation probe; differentiation; pathogenic; vaccine strain;  
 XX cattle brucellosis; ss.  
 KW Synthetic.  
 OS  
 XX RU2095418-C1.  
 XX  
 XX 10-NOV-1997.  
 PD  
 XX  
 XX 01-JUL-1994; 94RU-00024845.  
 PF  
 XX  
 XX 01-JUL-1994; 94RU-00024845.  
 PR  
 XX  
 XX (KZVE-) KAZAN VETERINARY MED ACAD.  
 PA  
 XX  
 XX Faizov T Kh, Idrisov GZ, Mullakaev OT;  
 PI  
 XX  
 XX WPI; 1998-411609/35.  
 DR  
 XX

PT Differentiating pathogenic and vaccine strains of cattle brucellosis -  
 PT using restriction digestion with Nco 1 and transfer of the DNA fragments  
 to filters in an electric field.  
 XX  
 XX Claim 1; Col 8; 4pp; Russian.  
 PS  
 XX The present sequence represents a hybridisation probe used to  
 CC differentiate between pathogenic and vaccine strains of cattle  
 CC brucellosis. The method comprises digestion of DNA from the test strain  
 CC with restriction enzyme Nco 1, transfer of the fragments obtained to  
 CC filters, subsequent fixing of these onto the filters, hybridisation with  
 CC a labelled sample, and examination of the results. (Updated on 25-MAR-  
 CC 2003 to correct PI field.)  
 XX  
 XX Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 230 GTGGTGGTGGTGGCG 244  
 |||||  
 DB 15 GTGGTGGTGGTGGTG 1

RESULT 2102  
 AAX31178/C  
 ID AAX31178 standard; DNA; 15 BP.  
 XX  
 XX AAX31178;  
 AC  
 XX 21-MAY-1999 (first entry)  
 DT  
 XX  
 XX Tag sequence of a transcript increased in colorectal cancer.  
 DE  
 XX Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;  
 KW diagnosis; prognosis; treatment; ss.  
 KM  
 XX Homo sapiens.  
 OS  
 XX MO9853319-A2.  
 PN  
 XX 26-NOV-1998.  
 PD  
 XX  
 XX 20-MAY-1998; 98MO-US010277.  
 PF  
 XX  
 XX 21-MAY-1997; 97US-0047352P.  
 PR  
 XX  
 XX (UYJO ) UNIV JOHNS HOPKINS.  
 PA  
 XX Vogelstein B, Kinzler KW;  
 XX  
 XX WPI; 1999-070161/06.  
 DR  
 XX  
 XX Use of isolated gene transcripts - useful for developing products for the  
 PT diagnosis, prognosis and treatment of cancers, particularly colon and  
 PT pancreatic cancer.  
 PT  
 XX Claim 2; Page 34; 120pp; English.  
 PS  
 XX AAX30947-31815 represent tag sequences of transcripts that are  
 CC differentially expressed in colorectal cancer, in pancreatic cancer, or  
 CC in both. The tag sequences can be used to identify genes by matching the  
 CC tag to a gen data base member, or by using the tag sequences as probes to  
 CC isolate unidentified genes from cDNA libraries. The tag sequences can  
 CC also be used in a method for diagnosing colon or pancreatic cancer in a  
 CC sample suspected of being neoplastic. The method comprises comparing the  
 CC level of at least one transcript in a first sample of a tissue to a  
 CC second sample, where the first sample is a colonic tissue suspected of  
 CC being neoplastic and the second sample is a normal human colonic tissue.  
 CC The transcript is identified by a tag selected from AAX30947-31815. The  
 CC methods of the invention can be used in the diagnosis, prognosis and  
 CC treatment of cancer



XX SQ Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 15;  
Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 926 TCACGCTGCTCCGTG 940  
Db 15 TCACGCTGCTCCATG 1

RESULT 2103  
AAAG2356  
ID AAA92356 standard; DNA; 15 BP.  
XX AC AAAG2356;  
XX DT 11-JAN-2001 (first entry)  
XX DE Original DNA template oligonucleotide sequence.  
XX KW Dideoxyribonucleic acid; dDNA; research; medical application;  
XX KM data communication; DNA sequencing; ss.  
XX OS Synthetic.  
XX PN CA2256128-A1.  
XX PD 29-JUN-2000.  
XX PF 29-DEC-1998; 98CA-02256128.  
XX PR 29-DEC-1998; 98CA-02256128.  
XX PA (DAVI) DAVIES S W.  
XX PI Davies SW;  
XX DR WPI; 2000-587794/56.  
XX PT Extracting sequences of bases from dideoxyribonucleic acid templates for  
PT research and medical applications, involves creating a new set of  
PT molecules which introduce error correcting code, from the template.  
XX PS Disclosure; Page 4; 9pp; English.  
XX CC The present invention describes a method (I) for extracting a sequence of  
CC bases from a dideoxyribonucleic acid (ddNA) template. The method  
CC comprises forming a set of products (P) selected to implement a code with  
CC desirable error correcting characteristics from the template through  
CC chemical reactions, obtaining a set of signals (S) from (P) by DNA  
CC sequencing and using the code to recover the base sequence from (S), to  
CC obtain accurate sequence estimate. (I) is useful for a research and  
CC medical applications. (I) minimises error rates in sequencing or testing  
CC nucleic acids. The present sequence represents an original DNA template  
CC which is used in the exemplification of the present invention  
XX SQ Sequence 15 BP; 5 A; 4 C; 4 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 15;  
Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1326 CAAGTACCAGCGGA 1340  
Db 1 CAAGTACCAGCTGA 15

RESULT 2104  
AAA29402/C  
ID AAA29402 standard; DNA; 15 BP.  
XX XX

AAAG29402;  
07-AUG-2000 (first entry)  
Acid/base orthological deprotection scheme 15-mer oligonucleotide #2.  
Acid/base orthological deprotection scheme; DNA synthesis;  
codon randomised nucleic acid; randomised cassette mutagenesis;  
phage display; ribosome display; protein-nucleic acid fusion;  
protein expression; in vitro translation system; ss.  
Synthetic.  
WO200018778-A1.  
06-APR-2000.  
28-SEP-1999; 99WO-US022436.  
29-SEP-1998; 98US-0102299P.  
(PHYL-) PHYLLOS INC.  
Lohse P, Kuimelis RG;  
WPI; 2000-293102/25.  
Synthesis of selected codon randomized nucleic acids useful for  
generation of DNA or RNA sequences for pharmaceutical research.  
Example 8; Page 29; 61pp; English.  
A method (I) has been developed for generating, in the same reaction  
vessel, a selected set of codons (II). The method comprises providing two  
(optionally three) sets of mononucleosides, mononucleotides,  
dinucleotides or mixtures of these and optionally repeatedly adding a  
third set, where (II) includes at least one codon having A or G at the  
third codon position and fewer than 3% of the codons correspond to a stop  
codon. Also described is a method (III) for generating an oligonucleotide  
from (II), comprising the method (I), followed by repeating the method  
until an oligonucleotide of the desired length is achieved. (I) and (II)  
are useful for chemically synthesising DNA or RNA. The DNA sequences  
generated provide a wide variety of protein products useful in  
pharmaceutical research. In particular the methods are useful in  
techniques of randomised cassette mutagenesis of proteins, phage display  
techniques, ribosome display techniques and protein-nucleic acid fusion  
techniques. Codon-randomised DNA can also be used in cellular cultures  
(in vivo) for protein expression, or for in vitro applications using,  
e.g. T7 RNA polymerase, and in vitro translation systems. The present  
sequence represents an oligonucleotide which is used in the  
exemplification of the present invention  
XX SQ Sequence 15 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 15;  
Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 374 AGGCTTCAGCCACGT 388  
Db 15 AGGCTTCAGCCACGT 1

RESULT 2105  
AAF50411/C  
ID AAF50411 standard; DNA; 15 BP.  
XX AC AAF50411;  
XX DT 30-MAR-2001 (first entry)  
XX DE IGF-I oligonucleotide #1371.  
XX XX

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX Homo sapiens.  
 XX WO200078341-A1.  
 XX PD 28-DEC-2000.  
 XX PF 21-JUN-2000; 2000WO-AU000693.  
 XX PR 21-JUN-1999; 99US-0140345P.  
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX PI Wright CJ, Werther GA, Edmondson SR;  
 XX WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX Example 8; Page 69; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

XX Sequence 15 BP; 7 A; 1 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1684 TACATCTTCCCTGCT 1698  
 DB 15 TACATTTCCCTGCT 1

RESULT 2106  
 AAF46589/C  
 ID AAF46589 standard; DNA; 15 BP.

XX AAF46589;

XX 30-MAR-2001 (first entry)

XX IGFBP3 oligonucleotide #9.

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX Homo sapiens.  
 XX WO200078341-A1.  
 XX PD 28-DEC-2000.  
 XX PF 21-JUN-2000; 2000WO-AU000693.  
 XX PR 21-JUN-1999; 99US-0140345P.  
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX PI Wright CJ, Werther GA, Edmondson SR;  
 XX WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX Example 7; Page 44; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

XX Sequence 15 BP; 1 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1634 GCAGGACGCGCTGG 1648  
 DB 15 GCAGGAAGCGCTGG 1

RESULT 2107  
 AAF50410/C  
 ID AAF50410 standard; DNA; 15 BP.

XX AAF50410;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #1370.

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

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XX OS Homo sapiens.
XX EN WO200078341-A1.
XX PD 28-DEC-2000.
XX PF 21-JUN-2000; 2000WO-AU0000693.
XX PR 21-JUN-1999; 99US-0140345P.
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX PI Wright CJ, Werther GA, Edmondson SR;
XX DR WPI; 2001-041421/05.
XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX PT UV (ultra-violet) treatment (optional) and an antisen nucleic acid that
XX PT inhibits or reduces growth factor mediated cell proliferation and/or
XX PT inflammation.
XX PS Example 8; Page 69; 201pp; English.
XX CC The present invention relates to a method for ameliorating the effects of
XX CC skin disorders. The method comprises contacting the skin with an
XX CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX CC inhibiting or reducing growth factor mediated cell proliferation,
XX CC inflammation and/or other disorders. The present sequence is an
XX CC oligonucleotide which can be used to design the antisense
XX CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX CC F45161). The method is useful for ameliorating the effects of psoriasis,
XX CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX CC hyperneovascular condition such as a neovascular condition of the retina,
XX CC brain or skin, growth factor-mediated malignancies, other sclerotic
XX CC disease, kidney disease, hyperproliferation of the inside of blood
XX CC vessels or any other hyperplasia
XX SQ Sequence 15 BP; 7 A; 1 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1685 ACATCTTCCTGCTT 1699
DB ||||| ||||| |||||
15 ACATTTTCCTGCTT 1

RESULT 2108
AAF50702/c
ID AAF50702 standard; DNA; 15 BP.
XX AC
XX AC AAF50702;
XX DT
XX DT 30-MAR-2001 (first entry)
XX DE
XX DE IGF-I oligonucleotide #1662.
XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX KW hyperneovascular condition; hyperplasia; kidney disease;
XX KW neovascular condition of the retina; ss.
XX OS Homo sapiens.
XX EN WO200078341-A1.

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XX 28-DEC-2000.
XX PD 21-JUN-2000; 2000WO-AU0000693.
XX PF 21-JUN-1999; 99US-0140345P.
XX PR (MURD-) MURDOCH CHILDRENS RES INST.
XX PA Wright CJ, Werther GA, Edmondson SR;
XX DR WPI; 2001-041421/05.
XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX PT inhibits or reduces growth factor mediated cell proliferation and/or
XX PT inflammation.
XX PS Example 8; Page 71; 201pp; English.
XX CC The present invention relates to a method for ameliorating the effects of
XX CC skin disorders. The method comprises contacting the skin with an
XX CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX CC inhibiting or reducing growth factor mediated cell proliferation,
XX CC inflammation and/or other disorders. The present sequence is an
XX CC oligonucleotide which can be used to design the antisense
XX CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX CC F45161). The method is useful for ameliorating the effects of psoriasis,
XX CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX CC hyperneovascular condition such as a neovascular condition of the retina,
XX CC brain or skin, growth factor-mediated malignancies, other sclerotic
XX CC disease, kidney disease, hyperproliferation of the inside of blood
XX CC vessels or any other hyperplasia
XX SQ Sequence 15 BP; 2 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1283 CAGGCATCTCTGCCA 1297
DB ||||| ||||| |||||
15 CAGGCATCTCTGCCA 1

RESULT 2109
ABZ34171
ID ABZ34171 standard; DNA; 15 BP.
XX AC
XX AC ABZ34171;
XX DT
XX DT 31-JAN-2003 (first entry)
XX DE
XX DE HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:413.
XX KW Human immunodeficiency virus; HIV; reverse transcriptase; RT; enzyme;
XX KW detection; mutation; anti-HIV drug resistance; polymorphism; resistance;
XX KW probe; ss.
XX OS Human immunodeficiency virus 1.
XX OS Synthetic.
XX PN WO200255741-A2.
XX PD 18-JUL-2002.
XX PF 09-JAN-2002; 2002WO-EP000153.
XX PR 11-JAN-2001; 2001EP-00870005.
XX PR 20-APR-2001; 2001EP-00870085.
XX PR 24-APR-2001; 2001US-0286102P.

```



CC diseases and for prediagnosis of such diseases, especially prion diseases  
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and  
 CC metabolic diseases; also to type genes that encode milk proteins,  
 CC hormones or transcription factors. The method is simpler, quicker and  
 CC particularly less expensive than known methods based on sequencing. This  
 CC sequence represents a prion protein polymorphic microsatellite marker  
 CC consensus sequence.

XX Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 230 GTGGTGGTGGTGGCG 244

DB 15 GTGGTGGTGGTGGTG 1

RESULT 2112

ID AAT32677 standard; DNA; 16 BP.

XX AAT32677;

DT 11-FEB-1997 (first entry)

DE Ineffective anti-HIV Rev response element probe 7819.

XX Rev response element; HIV isolate sf2; hybridize probe pool;  
 XX hybridize mapping; ss.

OS Synthetic.

FH Key Location/Qualifiers  
 FT modified\_base 1..16

FT /\*tag= a  
 FT /note= "Linked via phosphorothioate linkages"

XX WO9617955-A2.

PD 13-JUN-1996.

PF 05-DEC-1995; 95WO-US015779.

PR 05-DEC-1994; 94US-00349316.

XX (CHTR ) CHIRON CORP.

PI Collins ML;

DR WPI; 1996-287198/29.

PT Detecting target binding oligo-nucleotide(s) - using oligo-nucleotide  
 PT probes with a nucleotide sequence which binds within a known sequence of  
 PT a target nucleic acid.

PS Example 5; Page 27; 43pp; English.

XX The sequences given in AAT32673-76 represent effective, and those in  
 CC AAT32677-83 ineffective, anti-HIV Rev response element probes isolated  
 CC from a hybridize probe pool. Hybridize mapping describes a method of  
 CC determining superior sites for binding oligonucleotides to a target  
 CC sequence, to identify improved discontinuous probes with high binding  
 CC constants. The method comprises obtaining a series of oligonucleotides  
 CC which are complementary to a known target sequence and which overlap each  
 CC other by 1-4 nucleotides. Each of these sequences is contacted with the  
 CC target sequence to permit specific hybridization, and detecting the  
 CC presence or absence of specific hybridization to determine  
 CC oligonucleotides which bind within the known target sequence. This  
 CC sequence was isolated using the probe sequences given in AAT32670-72. The  
 CC number of this probe corresponds to the 5' position on the HIV sf2 target  
 CC to which the 3' end of the probe binds

XX Sequence 16 BP; 4 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 16;  
 Best Local Similarity 93.3%; Pred. No. 1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 156 GTCAATGACACTCCG 170

DB 1 GTCAATGACACTCCG 15

RESULT 2113

ID AAT11976/c standard; DNA; 17 BP.

XX AAT11976;

DT 25-MAR-2003 (revised)

DT 13-MAR-1996 (first entry)

DE CMV antisense oligonucleotide (ISIS 5480).

XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;  
 KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.

OS Synthetic.

FH Key Location/Qualifiers

FT modified\_base 1..17

FT /\*tag= a

FT /note= "phosphorothioate backbone"

XX US5442049-A.

PD 15-AUG-1995.

PF 25-JAN-1993; 93US-00009263.

PR 19-NOV-1992; 92US-00927506.

XX (ISIS-) ISIS PHARM INC.

PI Baker B, Draper K, Anderson K;

XX WPI; 1995-292538/38.

PT New oligo-nucleotide inhibits cytomegalovirus replication - by binding to  
 PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and  
 PT treatment of CMV diseases.

PS Example 10; Col 17; 66pp; English.

XX AAT11971-84 are antisense oligonucleotides (ONS) against human  
 CC cytomegalovirus (CMV) that displayed activities of at least 50 % of  
 CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal  
 CC mismatches could be tolerated without loss of antiviral activity.  
 CC Antisense ONS targeting CMV DNA or RNA coding for the IE1, IE2 or DNA  
 CC polymerase proteins have been shown to be effective in therapy,  
 CC prophylaxis and diagnosis of CMV infection. The ONS may be modified to  
 CC reduce nuclease resistance and to increase their efficacy. Modifications  
 CC include phosphorothioate backbones, alkyl and halogen-substituted sugar  
 CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF  
 CC field.)

XX Sequence 17 BP; 0 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 135 GAAGAAGATCAACG 149



```
DE Human KDR VEGF receptor hammerhead ribozyme substrate #483.
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX WO9715662-A2.
PN
XX 01-MAY-1997.
PD
XX 25-OCT-1996; 96WO-US017480.
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR ) CHIRON CORP.
PA
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX WPI; 1997-259017/23.
DR
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
PT
XX
XX Claim 4; Page 111; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 1 A; 3 C; 6 G; 0 T; 7 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 60.0%; Pred. No. 1.1e+03;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
QY 1032 TGACTTTGGCCTGGC 1046
Db :|||||:|
3 UGACUUGGCUUGGC 17
RESULT 2117
AAV97521
ID AAV97521 standard; RNA; 17 BP.
XX
XX AAV97521;
AC
XX 17-MAR-1999 (first entry)
DT
XX Human EGF-R target sequence nucleotide position 2624.
DE
XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW cancer; genetic drift; detection; mutation; ss.
XX
XX Homo sapiens.
OS
XX WO9833893-A2.
PN
XX 06-AUG-1998.
PD
```

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XX 14-JAN-1998; 98WO-US000730.
XX
XX 31-JAN-1997; 97US-0036476P.
PR
XX 04-DEC-1997; 97US-00985162.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (UYAS-) UNIV ASTON.
XX
XX Akhtar S, Fell P, Mcswiggen JA;
PI
XX WPI; 1998-437449/37.
XX
XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT growth factor receptor, useful for inhibiting cell proliferation and for
PT treating cancers.
PT
XX
XX Claim 5; Page 74; 109pp; English.
XX
XX The present invention describes enzymatic nucleic acid molecules (NAMS)
CC which specifically cleave RNA derived from an epidermal growth factor
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC represent specifically claimed target sequence from human EGF-R. AAV98044
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMS can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell
XX
XX Sequence 17 BP; 3 A; 8 C; 2 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 989 CCCAGAACCTGCTCA 1003
Db :|||||:|
3 CCCAGUACCGCUCA 17
RESULT 2118
AAV69694
ID AAV69694 standard; DNA; 17 BP.
XX
XX AAV69694;
AC
XX 05-FEB-1999 (first entry)
DT
XX Human GDNF gene exon 1 specific nested probe exon 1B.
DE
XX GDNF; glial cell line-derived neurotrophic factor; promoter; seizure;
KW transcription; environmental stimulus; modulator; neural degeneration;
KW Parkinson's disease; Lou Gehrig's disease; developmental defect; tumour;
KW gene therapy; neural degeneration; immunodeficiency; haemophilia; cancer;
KW human; probe; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO9846737-A2.
PN
XX 22-OCT-1998.
PD
XX 15-APR-1998; 98WO-US007730.
PF
XX 15-APR-1997; 97US-00842675.
PR
XX (UYNE-) UNIV NEW JERSEY.
XX
XX Black IA, Woodbury D, Schaar DG, Ramakrishnan L;
PI
```

DR WPI; 1998-594570/50.

XX New isolated glial cell line-derived neurotrophic factor promoter - used

PT to develop products for treating e.g. neuronal degeneration,

PT immunodeficiency, haemophilia or proliferative disorders such as cancers.

XX Example 1; Page 43; 69pp; English.

XX Sequences AAV69693 and AAV69694 represent nested oligonucleotide probes

CC corresponding to the exon 1 of the human glial cell line-derived

CC neurotrophic factor (GDNF) gene. These were used to identify the

CC initiation of transcription of hGDNF gene. The invention relates to the

CC use of the human GDNF promoter which contains a proximal section which

CC ensures consistent low level GDNF expression in multiple cell types, and

CC a distal section designed to alter transcription during development and

CC in response to environmental stimuli. The GDNF promoter can be used for

CC expressing GDNF in a cell, for identifying modulators and binding

CC partners of a GDNF promoter and modulators of GDNF expression. The

CC products can be used for diagnosis and treatment of disorders involving

CC GDNF such as neural degeneration, e.g. seizures, Parkinson's disease, Lou

CC Gehrig's disease, and various developmental defects resultant from the

CC decreased levels of GDNF during the prenatal and neonatal stage. The GDNF

CC promoter is also used for gene therapy and for expressing heterologous

CC genes for treating e.g. severe combined immunodeficiency, haemophilia or

XX proliferative disorders such as tumours and cancers

SQ Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1422 TCGGATCTCGCAGA 1436

Db 1 TCGGGTCTCGCAGA 15

RESULT 2119

AAAX17893/C

ID AAX17893 standard; DNA; 17 BP.

XX AAX17893;

XX 11-MAY-1999 (first entry)

DE Anti-CMV oligonucleotide #5480.

XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;

KW cytomegalovirus; inhibition; replication; sugar modification;

KW phosphorothioate; infection; retinitis; ss.

XX Synthetic.

OS Human herpesvirus 5.

XX WO9845314-A1.

XX 15-OCT-1998.

XX 07-APR-1998; 98WO-US006895.

XX 09-APR-1997; 97US-00838715.

XX (ISIS-) ISIS PHARM INC.

XX Draper KG, Kisner DL, Anderson KP, Chapman S;

PT WPI; 1998-568330/48.

XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -

PT particularly including 2-methoxyethoxy sugar modifications, especially

PT for treating viral retinitis, with long-lasting retention in the retina.

XX Claim 7; Page 30; 99pp; English.

XX Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic

CC acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA

CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV

CC replication. Optionally the oligonucleotides include at least one 2'-(2-

CC methoxyethoxy) sugar modification or phosphorothioate internucleotide

CC linkages. The oligonucleotides are used to inhibit CMV infections (by in

CC vivo or in vitro contact with cells, tissues or body fluids), especially

CC to treat or prevent CMV infections, particularly retinitis

SQ Sequence 17 BP; 0 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 135 GAAGAAGATCAACG 149

Db 16 GAAGAAGATCAACG 2

RESULT 2120

AAAX1066/C

ID AAX21066 standard; RNA; 17 BP.

XX AAX21066;

XX 19-JUN-2000 (first entry)

DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:4292.

XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;

KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;

KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;

KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;

KW age related macular degeneration; inflammation; neovascular glaucoma;

KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;

KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;

KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX Homo sapiens.

XX WO9950403-A2.

XX 07-OCT-1999.

XX 24-MAR-1999; 99WO-US006507.

XX 27-MAR-1998; 98US-0079678P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Meswigen JA;

PT WPI; 1999-591315/50.

XX Novel ribozymes for modulating the synthesis, expression and/or stability

PT of an mRNA encoding an angiogenic factors.

XX Claim 55; Page 185; 305pp; English.

XX The present invention describes enzymatic nucleic acid molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAX16775 to

CC AAX17167 and AAX17561 to AAX17622 represent ribozyme sequences for ARNT,

CC and AAX17168 to AAX17560 and AAX17623 to AAX17684 represent their

CC corresponding target sequences; AAX17685 to AAX18385 and AAX19087 to

CC AAX19154 represent ribozyme sequences for Tie-2, and AAX18386 to AAX19086

CC and AAX19155 to AAX19222 represent their corresponding target sequences;

CC and AAX19223 to AAX20361 and AAX21501 to AAX21595 represent ribozyme

CC sequences for integrin alpha 6 subunit, and AAX20362 to AAX21500 and



CC AAA21596 to AAA21688 represent their corresponding target sequences;  
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 CC AAA23422 represent their corresponding target sequences. The ribozymes of  
 CC the invention are used for modulating the synthesis, expression and/or  
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 CC especially used to treat cancer, diabetic retinopathy, age related  
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 CC integrin subunit alpha-6, or integrin subunit beta-3  
 XX  
 SQ Sequence 17 BP; 2 A; 0 C; 7 G; 0 T; 8 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 1314 ATCAACTACCCCAA 1328  
 Db 16 ACACAACTACCCCAA 2  
 RESULT 2121  
 AAA23257/c  
 ID AAA23257 standard; RNA; 17 BP.  
 XX  
 AC AAA23257;  
 XX  
 DT 19-JUN-2000 (first entry)  
 XX  
 DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6483.  
 XX  
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytotstatic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO9950403-A2.  
 XX  
 PD 07-OCT-1999.  
 XX  
 PF 24-MAR-1999; 99WO-US006507.  
 XX  
 PR 27-MAR-1998; 98US-0079678P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
 XX  
 DR WPI; 1999-591315/50.  
 XX  
 PT Novel ribozymes for modulating the synthesis, expression and/or stability  
 PT of an mRNA encoding an angiogenic factors.  
 XX  
 PS Claim 54; Page 271; 305pp; English.  
 XX  
 CC The present invention describes enzymatic nucleic acid molecules with RNA  
 CC cleaving activity, which specifically cleave RNA encoded by an aryl  
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their

CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 CC AAA21596 to AAA21688 represent their corresponding target sequences;  
 CC AAA1689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 CC AAA23422 represent their corresponding target sequences. The ribozymes of  
 CC the invention are used for modulating the synthesis, expression and/or  
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 CC especially used to treat cancer, diabetic retinopathy, age related  
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 CC integrin subunit alpha-6, or integrin subunit beta-3  
 XX  
 SQ Sequence 17 BP; 3 A; 4 C; 4 G; 0 T; 6 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 808 ATTATCCACGCGAG 822  
 Db 16 ATTATCCAAACGCGAG 2  
 RESULT 2122  
 AAA20471  
 ID AAA20471 standard; RNA; 17 BP.  
 XX  
 AC AAA20471;  
 XX  
 DT 19-JUN-2000 (first entry)  
 XX  
 DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3697.  
 XX  
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytotstatic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO9950403-A2.  
 XX  
 PD 07-OCT-1999.  
 XX  
 PF 24-MAR-1999; 99WO-US006507.  
 XX  
 PR 27-MAR-1998; 98US-0079678P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
 XX  
 DR WPI; 1999-591315/50.  
 XX  
 PT Novel ribozymes for modulating the synthesis, expression and/or stability  
 PT of an mRNA encoding an angiogenic factors.  
 XX  
 PS Claim 55; Page 147; 305pp; English.  
 XX  
 CC The present invention describes enzymatic nucleic acid molecules with RNA

Claim 77; Page 58; 148pp; English.

The present invention describes nucleic acids (A) that interact stably with a target sequence and contain at least one phosphorodithioate link, having endonuclease activity. (A), and more generally any catalytic nucleic acid (A') that modulates expression of the oestrogen receptor gene, are used to treat cancer (particularly of breast or endometrium), in vivo or by transforming cells ex vivo and implanting treated cells, or for other conditions associated with levels of oestrogen receptor. Because of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, particularly for identification of therapeutic targets, and as research reagents (for RNA, in the same way that restriction endonucleases are used with DNA). The combination of modifications in (A) improves resistance to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and AAA24748 to AAA25992 represent their corresponding target sequences. AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme sequences, and AAA26107 to AAA26218 represent their corresponding target sequences. AAA26219 to AAA26271 represent other ribozyme sequences and antisense oligonucleotides used in the exemplification of the present invention

Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0

QY 1315 TACAACTACCCCAAG 1329

Db 2 TAACTACCCGAG 16

ID	AAF06373 standard; DNA; 17 BP.
XX	
AC	AAF06373;

DT 16-FEB-2001 (first entry)

DE Hammerhead ribozyme substrate #3170.

XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW

KW	interferon alpha; ss.
XX	
XX	
OS	Homo sapiens.
XX	
XX	
PN	W0200061729-A2.

PD 19-OCT-2000.

AA  
PF 11-APR-2000; 2000WO-US009721.

XX  
PR 12-APR-1999: 99UTS-0129390P.

XX  
DA (PBO-) PBOZYME PHARM INC[illegible]

XXI

DR  
WPT; 2000-04/423/02.  
XX

pt Enzymatic and antisense nucleic acid inhibition of repressor genes,  
pt useful for producing e.g. granulocyte colony stimulating factor protein,

PT interferon alpha and erythropoietin.

PS Claim 42; Page 128; 164pp; English.

CC The present invention relates to enzymatic and antisense nucleic acid

CC molecules that act as inhibitors of the expression of repressor genes

CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription

CC  
LACTOFERRIN, IGF-2 and/or the early developmental process.

CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 73.3%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
 QY 686 ACAACCTGTGGCAG 700  
 Db ||| ||:|||||  
 2 ACAUCCUUGGCAG 16  
 RESULT 2125  
 ABK03332/C  
 ID ABK03332 standard; RNA; 17 BP.  
 XX  
 AC ABK03332;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human CD20 Inozyme #283.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGEN J.  
 PA (CHOW/) CHOWIRRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowirra BM;  
 XX  
 DR WPI; 2001-607195/69.  
 XX  
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 PS Claim 30; Page 150; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule

CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberyne (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 395 ATCAGGTGAGTCTC 409  
 Db || |||||  
 15 ATCAGGTGAGTCTC 1  
 RESULT 2126  
 ABK03331/C  
 ID ABK03331 standard; RNA; 17 BP.  
 XX  
 AC ABK03331;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human CD20 Inozyme #282.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGEN J.  
 PA (CHOW/) CHOWIRRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowirra BM;  
 XX  
 DR WPI; 2001-607195/69.  
 XX  
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 PS Claim 30; Page 150; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule

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XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
PI Blatt L, Mcswiggen J, Chowrira BM;
XX WPI; 2001-607195/69.
XX
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
XX Claim 30; Page 150; 200pp; English.
XX
XX The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOCO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a NYN motif) pr
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or a
CC an amberyze (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a Ygr motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg2+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targeting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg2+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
XX Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 396 TCAGGTGCAGTCTCC 410
Db 17 TCAGGTGCAGTCTCC 3

RESULT 2127
AAD03853/c
ID AAD03853 standard; DNA; 17 BP.
XX
XX AAD03853;
AC
XX
XX 02-JUL-2001 (first entry)
DT
XX
XX Human cell cycle checkpoint protein, hchk1 DNA amplifying PCR primer #2.
DE
XX
XX Human; cell cycle checkpoint; chk1; tumour; malignancy;
KW cell growth inhibitor; development deficiency; PCR primer; DNA damage;
KW kinase; ss.

```

```

XX Homo sapiens.
OS
XX US6218109-B1.
PN
XX 17-APR-2001.
XX
XX 05-SEP-1997; 97US-00924183.
PF
XX 05-SEP-1997; 97US-00924183.
XX
XX (BAYU ) BAYLOR COLLEGE MEDICINE.
PA
XX Elledge SJ, Sanchez Y;
PI
XX WPI; 2001-289827/30.
DR
XX
XX New Chk1 proteins and gene sequences encoding the proteins useful as
PT probes for a portion of the chromosome associated with tumors and other
PT malignancies, growth and/or development deficiencies.
XX
XX Claim 17; Col 24; 37pp; English.
XX
XX The present sequence is a degenerate PCR primer used for amplifying the
CC human cell cycle checkpoint protein, hchk1 DNA. The cell cycle
CC checkpoints are regulatory pathways that control the order and timing of
CC cell cycle transitions, and ensure that critical events such as DNA
CC replication and chromosome segregation are completed with high fidelity.
CC The chk1 protein controls cell cycle in response to DNA damage. It
CC functions as kinase and phosphorylates the key regulators of Cdk tyrosine
CC phosphorylation. The checkpoint gene sequences are used as probes for a
CC portion of the chromosome associated with tumours and other malignancies,
CC as well as growth and/or development deficiencies. The chk1 proteins are
CC useful for generating specific antibodies and for inhibiting growth of
CC cells
XX
XX Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1033 GACITTTGGCCTGGCC 1047
Db 17 GACITTTGGCCTGGCC 3

RESULT 2128
AAS95074/c
ID AAS95074 standard; DNA; 17 BP.
XX
XX AAS95074;
AC
XX 13-FEB-2002 (first entry)
DT
XX
XX Human otoferlin exon PCR primer #39.
DE
XX
XX Human; mouse; otoferlin; OTOF; brain; auditory function; PCR primer;
KW autosomal nonsyndromic prelingual deafness; DFNE9; ss.
XX
XX Homo sapiens.
OS
XX WO200170972-A2.
PN
XX 27-SEP-2001.
PD
XX
XX 23-MAR-2001; 2001WO-IB000578.
PF
XX 24-MAR-2000; 2000US-0191738P.
PR
XX (INSP ) INST PASTEUR.
PA (CNRS ) CNRS CENT NAT RECH SCI.
XX

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PI Yasunaga S, Grati M, Cohen-Salmon M, El Amraoui A, Petit C;  
PI Weil D;  
XX WPI; 2001-611499/70.  
XX Novel human gene Otoferlin, underlying an autosomal recessive  
PT nonsyndromic prelingual deafness, DFNB9, and proteins encoded by the  
PT gene, implicated in deafness.  
XX Claim 25; Page 17; 99pp; English.  
XX The invention relates to a purified polynucleotide (I) encoding a protein  
CC sequence (II) encoded by a novel human gene, otoferlin (OTOF) or the long  
CC human otoferlin isoform in brain. (I) was identified as underlying an  
CC autosomal nonsyndromic prelingual deafness DFNB9, and is thus useful for  
CC detecting deafness disease in humans and for characterising the functions  
CC of proteins and genes encoding them in auditory function. AAS95022-  
CC AAS9248 represent human and mouse otoferlin coding sequences, PCR  
CC primers and related sequences of the invention  
XX  
SQ Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 495 CCGCTGCCTGAGGG 509  
Db 15 CAGGCTGCCTGAGGG 1  
RESULT 2129  
ABN08906/C  
ID ABN08906 standard; DNA; 17 BP.  
XX  
AC ABN08906;  
XX  
XX 29-MAY-2002 (first entry)  
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8898.  
DE  
DE Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
XX skeletal muscle disorder; amplicon; screening; ss.  
XX Homo sapiens.  
XX WO200192524-A2.  
XX  
XX 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
PI  
XX

DR WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX Disclosure; SEQ ID NO 8898; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 2 A; 9 C; 4 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 165 ACTCGAGGTGGCGG 179  
Db 15 ACTCGAGGTGGCGG 1  
RESULT 2130  
ABN00075/C  
ID ABN00075 standard; DNA; 17 BP.  
XX  
XX AC ABN00075;  
XX  
XX 29-MAY-2002 (first entry)  
XX  
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:67.  
XX  
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
XX Homo sapiens.  
XX WO200192524-A2.  
XX  
XX 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
PI  
XX

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PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 67; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. NO. 1.1e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1181.ATGAGATGGCCACAG 1195
DB ||||| ||||| |||||
16 ATGAGATGGACACAG 2
XX
RESULT 2131
ABN00074/c
ID ABN00074 standard; DNA; 17 BP.
XX
XX AC ABN00074;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:66.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX

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PF 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234587P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 66; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 2 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. NO. 1.1e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1181.ATGAGATGGCCACAG 1195
DB ||||| ||||| |||||
17 ATGAGATGGACACAG 3
XX
RESULT 2132
ABN08905/c
ID ABN08905 standard; DNA; 17 BP.
XX
XX AC ABN08905;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8897.
XX

```

XX Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200192524-A2.  
 XX  
 XX 06-DEC-2001.  
 XX  
 XX 25-MAY-2001; 2001WO-US016981.  
 XX  
 XX 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX  
 XX (AEOM-) AEOMICA INC.  
 XX  
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX WPI; 2002-179446/23.  
 XX  
 XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
 XX  
 XX Disclosure; SEQ ID NO 8937; 214pp; English.  
 XX  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 XX Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 165 ACTCGAGGTGGCG 179  
 |||||  
 16 ACTCGAGGTGGCG 2

RESULT 2133  
 ABN00076/c  
 ID AEN000076 standard; DNA; 17 BP.  
 XX  
 XX AC AEN000076;  
 XX  
 XX 29-MAY-2002 (first entry)  
 XX  
 XX Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:68.

XX Human; genome-derived myosin-like protein 1; GDMLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200192524-A2.  
 XX  
 XX 06-DEC-2001.  
 XX  
 XX 25-MAY-2001; 2001WO-US016981.  
 XX  
 XX 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 05-FEB-2001; 2001WO-US000670.  
 XX  
 XX (AEOM-) AEOMICA INC.

Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 WPI; 2002-179446/23.  
 New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
 or as specific biomolecule capture probes for surface-enhanced laser  
 desorption ionization, comprises human myosin-like protein hGDMLP-1.  
 Disclosure; SEQ ID NO 68; 214pp; English.

The present invention describes a human genome-derived myosin-like  
 protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
 nucleic acids can be used as probes to detect, characterise and quantify  
 hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
 provide initial substrates for the recombinant engineering of hGDMLP-1  
 protein variants having desired phenotypic improvements, and for  
 expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
 used as immunogens to raise antibodies that specifically recognise hGDMLP  
 -1 proteins, as standards in assays used to determine the concentration  
 and/or amount specifically of hGDMLP proteins, as specific biomolecule  
 capture probes for surface-enhanced laser desorption ionisation, as  
 therapeutic supplement in patients having specific deficiency in hGDMLP-1  
 production, and in vaccines or for replacement therapy. The  
 polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
 disorder associated with the expression of hGDMLP-1, in particular heart  
 and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
 The present sequence represents an oligomer used in the screening of the  
 hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
 The sequence data for this patent did not form part of the printed  
 specification, but was obtained in electronic format directly from WIPO



CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1181 ATGAGATGGCCACAG 1195  
Db 15 ATGAGATGGCCACAG 1  
RESULT 2134  
ABN08904/c  
ID ABN08904 standard; DNA; 17 BP.  
XX AC ABN08904;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8996.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX OS Homo sapiens.  
XX  
XX WO200192524-A2.  
XX  
XX 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
XX  
XX 21-SEP-2000; 2000US-0234687P.  
XX  
XX 27-SEP-2000; 2000US-0236359P.  
XX  
XX 04-OCT-2000; 2000GB-00024263.  
XX  
XX 30-JAN-2001; 2001WO-US000661.  
XX  
XX 30-JAN-2001; 2001WO-US000662.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
XX  
XX 30-JAN-2001; 2001WO-US000664.  
XX  
XX 30-JAN-2001; 2001WO-US000665.  
XX  
XX 30-JAN-2001; 2001WO-US000666.  
XX  
XX 30-JAN-2001; 2001WO-US000667.  
XX  
XX 30-JAN-2001; 2001WO-US000668.  
XX  
XX 30-JAN-2001; 2001WO-US000669.  
XX  
XX 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX  
XX WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
XX or as specific biomolecule capture probes for surface-enhanced laser  
XX desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
XX Disclosure; SEQ ID NO 8896; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
XX protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
XX 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
XX nucleic acids can be used as probes to detect, characterise and quantify  
XX hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
XX provide initial substrates for the recombinant engineering of hGDMLP-1  
XX protein variants having desired phenotypic improvements, and for  
XX expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
XX used as immunogens to raise antibodies that specifically recognise hGDMLP-  
XX -1 proteins, as standards in assays used to determine the concentration  
CC  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 2 A; 7 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 165 ACTCCGAGGTGGCG 179  
Db 17 ACTCCGAGGTGGCG 3  
RESULT 2135  
ABQ63456/c  
ID ABQ63456 standard; DNA; 17 BP.  
XX AC ABQ63456;  
XX  
XX 20-AUG-2002 (first entry)  
XX  
XX Human KTOM1a portion (ABQ63232) probe # 169.  
XX  
XX Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;  
XX gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;  
XX kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.  
XX OS Homo sapiens.  
XX  
XX WO200224750-A2.  
XX  
XX 28-MAR-2002.  
XX  
XX 21-SEP-2001; 2001WO-US029656.  
XX  
XX 21-SEP-2000; 2000US-0234687P.  
XX  
XX 27-SEP-2000; 2000US-0236359P.  
XX  
XX 04-OCT-2000; 2000GB-00024263.  
XX  
XX 30-JAN-2001; 2001WO-US000661.  
XX  
XX 30-JAN-2001; 2001WO-US000662.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
XX  
XX 30-JAN-2001; 2001WO-US000664.  
XX  
XX 30-JAN-2001; 2001WO-US000665.  
XX  
XX 30-JAN-2001; 2001WO-US000666.  
XX  
XX 30-JAN-2001; 2001WO-US000667.  
XX  
XX 30-JAN-2001; 2001WO-US000668.  
XX  
XX 30-JAN-2001; 2001WO-US000669.  
XX  
XX 23-MAY-2001; 2001US-00864761.  
XX  
XX 28-AUG-2001; 2001US-0315676P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Zhang J;  
XX  
XX WPI; 2002-479509/51.  
XX  
XX New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic  
XX acids encoding the protein, useful for treating subjects having defects  
XX in KTOM1 which can manifest as cancer of the kidney, or as a disorder of  
XX e.g., liver or bone.  
XX  
XX



Example 2; Page 179; 418pp; English.

XX The invention relates to a novel isolated nucleic acid encoding human  
XX KTM01 (kidney tumour overexpressed membrane) protein. The protein of the  
CC invention has cytostatic activity. The nucleotide may have a use in gene  
CC therapy. The KTM01 nucleic acids may be used to diagnose, treat or  
CC monitor a disease caused by altered expression of human KTM01.  
CC Compositions comprising the nucleic acids, proteins or antibodies may be  
CC used to treat subjects having defects in KTM01 which can manifest as  
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,  
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta  
CC function. The sequence represents a probe used in the invention to scan  
XX the nt 1-1001 portion of human KTM01a (ABQ63232)  
XX  
SQ Sequence 17 BP; 5 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1397 AGCTGTTCAGTTTG 1411  
||| ||||| ||||| ||  
Db 16 AGCTGTTCAGTTTG 2

RESULT 2136  
ABQ63457/c  
ID ABQ63457 standard; DNA; 17 BP.

XX ABQ63457;

XX 20-AUG-2002 (first entry)

XX Human KTM01a portion (ABQ63232) probe # 170.

XX Human; KTM01a; KTM01; kidney tumour overexpressed membrane; cytostatic;  
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;  
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.  
XX  
OS Homo sapiens.

XX WO200224750-A2.

PN 28-MAR-2002.

XX 21-SEP-2001; 2001WO-US029656.

XX 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 30-JAN-2001; 2001WO-US000670.

PR 23-MAY-2001; 2001US-00864761.

PR 28-AUG-2001; 2001US-0315676P.

XX (AEOM-) AEOMICA INC.

XX Zhang J;

XX WPI; 2002-479509/51.

XX New human kidney tumor overexpressed membrane (KTM01) protein and nucleic  
PT acids encoding the protein, useful for treating subjects having defects  
PT in KTM01 which can manifest as cancer of the kidney, or as a disorder of  
PT e.g., liver or bone.

XX Example 2; Page 179; 418pp; English.

XX The invention relates to a novel isolated nucleic acid encoding human  
XX KTM01 (kidney tumour overexpressed membrane) protein. The protein of the  
CC invention has cytostatic activity. The nucleotide may have a use in gene  
CC therapy. The KTM01 nucleic acids may be used to diagnose, treat or  
CC monitor a disease caused by altered expression of human KTM01.  
CC Compositions comprising the nucleic acids, proteins or antibodies may be  
CC used to treat subjects having defects in KTM01 which can manifest as  
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,  
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta  
CC function. The sequence represents a probe used in the invention to scan  
XX the nt 1-1001 portion of human KTM01a (ABQ63232)  
XX

SQ Sequence 17 BP; 6 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1397 AGCTGTTCAGTTTG 1411  
||| ||||| ||||| ||  
Db 15 AGCTGTTCAGTTTG 1

RESULT 2137

ABV78816/c

ID ABV78816 standard; DNA; 17 BP.

XX ABV78816;

XX 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 62.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;

KW human testis expressed Patched like protein; testis; adrenal; liver;

KW male germ cell development; bone marrow; brain; kidney; lung; placenta;

KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX Homo sapiens.

XX EP1229046-A2.

XX 07-AUG-2002.

XX 28-JAN-2002; 2002EP-00001167.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 23-MAY-2001; 2001US-00864761.

XX 09-OCT-2001; 2001US-0327898P.

XX (AEOM-) AEOMICA INC.

XX Zhan J;

XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
PT for identifying agonist and antagonist and specific binding partners, and  
PT for treating subjects having defects in HTPL.

XX Example 2; Page 71; 718pp; English.

XX The present invention relates to human testis expressed Patched like  
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL  
CC has two isoforms, with a few single base pair differences between the

The present invention relates to human testis expressed Patched like

PS Claim 4: Page 124; 149pp; English.

CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberosus scleriosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 CC  
 CC  
 CC Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 1295 CCAACGAGGAGTCA 1309  
 ||||| |||||  
 Db 3 CCAACGGGAGUUA 17

RESULT 2140  
 ABS75020  
 ID ABS75020 standard; DNA; 17 BP.

XX AC ABS75020;

XX DT 24-DEC-2002 (first entry)

XX DE Human PAPP-Ea associated 17-mer SEQ ID 546.

XX KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
 KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
 XX dysgenetic pregnancy; primer; ss.

XX OS Homo sapiens.

XX FN US2002102252-A1.

XX PD 01-AUG-2002.

XX PF 06-APR-2001; 2001US-00827998.

XX XX 26-MAY-2000; 2000US-0207456P.

XX PA (GUY/) GU Y.

XX PA (SHAN/) SHANNON M E.

XX PI Gu Y, Shannon ME;

XX DR WPI; 2002-697817/75.

XX PT New isolated nucleic acid encoding an isoform of human pregnancy  
 associated plasma protein E, for preventing or aborting pregnancy.

XX PS Example 2; Page 147; 353pp; English.

CC This invention describes a novel isolated nucleic acid that encodes one  
 CC of three new isoforms of human pregnancy associated plasma protein E,  
 CC hPAPP-E. The products of the invention have abortive and contraceptive  
 CC activity and can be used for gene therapy or in a vaccine. The nucleic  
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
 CC used in pharmaceutical compositions or vaccines for preventing or  
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
 CC antibodies can be used to assess the expression levels of PAPP-E isoform  
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
 CC antenatally. This sequence represents an oligomer used in scanning the  
 CC human PAPP-E genes described in the disclosure of the invention

SQ Sequence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 289 CTTCTGTTCTGCAAGG 303  
 ||||| |||||  
 Db 1 CTTCTGTTCTGCAAGG 15

RESULT 2141

ABV90264  
 ID ABV90264 standard; DNA; 17 BP.

XX AC ABV90264;

XX DT 23-DEC-2002 (first entry)

XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 977.

XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.

XX OS Homo sapiens.

XX PN BP1239051-A2.

XX PD 11-SEP-2002.

XX PF 28-JAN-2002; 2002EP-00001165.

XX PR 30-JAN-2001; 2001WO-US000663.

XX PR 30-JAN-2001; 2001WO-US000664.

XX PR 30-JAN-2001; 2001WO-US000665.

XX PR 30-JAN-2001; 2001WO-US000666.

XX PR 30-JAN-2001; 2001WO-US000667.

XX PR 30-JAN-2001; 2001WO-US000668.

XX PR 30-JAN-2001; 2001WO-US000669.

XX PR 30-JAN-2001; 2001WO-US000670.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 10-OCT-2001; 2001US-0328205P.

XX PA (AEOM-) AEOMICA INC.

XX PI Shannon M;

XX DR WPI; 2002-684061/74.

XX PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.

XX PS Example 2; SEQ ID NO 977; 60pp + Sequence Listing; English.

CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),

CC (S1) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC encoding (I) are useful for diagnosing, monitoring disease and treating  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office  
 XX  
 SQ Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1242 CATCTTCGCTATCTT 1256  
 Db 3 CATCTTCGCTATCTT 17  
 RESULT 2142  
 ABV91092/c  
 ID ABV91092 standard; DNA; 17 BP.  
 XX  
 AC ABV91092;  
 XX  
 DT 23-DEC-2002 (first entry)  
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1805.  
 XX  
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 DN EP1239051-A2.  
 XX  
 PD 11-SEP-2002.  
 XX  
 PF 28-JAN-2002; 2002EP-00001165.  
 XX  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 10-OCT-2001; 2001US-0328205P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 PI Shannon M;  
 XX  
 DR WPI; 2002-684061/74.  
 XX  
 KW Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 XX  
 PS Example 2; SEQ ID NO 1805; 60pp + Sequence Listing; English.  
 XX

CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (S1, ABB33999) a sequence having 65% sequence identity to (S1),  
 CC (S1) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC encoding (I) are useful for diagnosing, monitoring disease and treating  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office  
 XX  
 SQ Sequence 17 BP; 8 A; 1 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1451 ATCCATTCTTCTCA 1465  
 Db 16 ATCCATTCTTCTCA 2  
 RESULT 2143  
 ABV91093/c  
 ID ABV91093 standard; DNA; 17 BP.  
 XX  
 AC ABV91093;  
 XX  
 DT 23-DEC-2002 (first entry)  
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1806.  
 XX  
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 DN EP1239051-A2.  
 XX  
 PD 11-SEP-2002.  
 XX  
 PF 28-JAN-2002; 2002EP-00001165.  
 XX  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 10-OCT-2001; 2001US-0328205P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 PI Shannon M;  
 XX  
 DR WPI; 2002-684061/74.  
 XX  
 KW Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.

```
XX PS Example 2; SEQ ID NO 1806; 60pp + Sequence Listing; English.
XX PS
XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling
XX CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
XX CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),
XX CC (SI) having 95% deviations, especially conservative substitutions or a
XX CC fragment of the sequences comprising at least 8 contiguous amino acids.
XX CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
XX CC adaptor protein that interacts with Rho family small GTPases as well as
XX CC downstream components of the signal transduction pathway. (I) is useful
XX CC for identifying a specific binding partner. (I) and nucleic acids (II)
XX CC encoding (I) are useful for diagnosing, monitoring disease and treating
XX CC caused by altered expression of human POSHL1 including diagnosing and
XX CC treating cancer, they are useful in the development of vaccines and (II) is
XX CC useful in gene therapy. (II) is useful for constructing microarrays which
XX CC are useful for measuring and for surveying gene expression and creating
XX CC transgenic non-human animals capable of producing the proteins. The
XX CC present sequence is that of a scanning oligonucleotide useful in examples
XX CC of the invention. Note: The present sequence did not form part of the
XX CC printed specification, but is based on sequence information supplied to
XX CC Derwent by the European Patent Office
XX SQ Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 1.1e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1451 ATCCATCTCTCTCA 1465
XX Db ATCCATCTCTCTCA 1
XX
XX RESULT 2144
XX ABV90265
XX ID ABV90265 standard; DNA; 17 BP.
XX AC ABV90265;
XX DT 23-DEC-2002 (first entry)
XX XX Human POSHL1 scanning oligonucleotide SEQ ID NO 978.
XX
XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
XX KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
XX KW gene therapy; transgenic; ss.
XX OS Homo sapiens.
XX PN EP1239051-A2.
XX PD 11-SEP-2002.
XX XX
XX PF 28-JAN-2002; 2002EP-00001165.
XX XX
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 30-JAN-2001; 2001WO-US000670.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 10-OCT-2001; 2001US-0328205P.
XX XX
XX PA (AEOM-) AEOMICA INC.
XX PI Shannon M;
XX WPI; 2002-684061/74.
XX
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Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL -1, useful for treating disorders associated with decreased expression or activity of human POSHL1.

Example 2; SEQ ID NO 978; 60pp + Sequence Listing; English.

The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SI, ABB83999), a sequence having 65% sequence identity to (SI), (SI) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and treating cancer, they are useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to Derwent by the European Patent Office

Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1242 CATCTTCCGTATCTT 1256  
Db CATCTTCCGTATCTT 16

RESULT 2145  
ABV90266  
ID ABV90266 standard; DNA; 17 BP.  
AC ABV90266;  
DT 23-DEC-2002 (first entry)  
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 979.  
XX  
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.  
OS Homo sapiens.  
PN EP1239051-A2.  
PD 11-SEP-2002.  
XX  
PF 28-JAN-2002; 2002EP-00001165.  
XX  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 10-OCT-2001; 2001US-0328205P.  
XX  
PA (AEOM-) AEOMICA INC.  
PI Shannon M;  
XX

XX  
DR WPI; 2002-684061/74.  
XX  
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or  
PT activity of human POSHL1.  
XX  
XX Example 2; SEQ ID NO 979; 60pp + Sequence Listing; English.  
PS  
XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (I) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX  
SQ Sequence 17 BP; 2 A; 6 C; 1 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 1242 CATCTTCGATCTT 1256  
Db 1 CATCTTCGATCTT 15  
  
RESULT 2146  
ABV91091/c  
ID ABV91091 standard; DNA; 17 BP.  
XX  
AC ABV91091;  
XX  
DT 23-DEC-2002 (first entry)  
XX  
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1804.  
XX  
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.  
XX  
OS Homo sapiens.  
XX  
XX EPI239051-A2.  
XX  
XX 11-SEP-2002.  
XX  
XX 28-JAN-2002; 2002EP-00001165.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000666.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 30-JAN-2001; 2001WO-US000670.  
XX 23-MAY-2001; 2001US-00864761.  
XX 10-OCT-2001; 2001US-0328205P.  
XX

PA (AEOM-) AEOMICA INC.  
XX  
XX Shannon M;  
XX  
XX WPI; 2002-684061/74.  
DR  
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or  
PT activity of human POSHL1.  
XX  
XX Example 2; SEQ ID NO 1804; 60pp + Sequence Listing; English.  
PS  
XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (I) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX  
SQ Sequence 17 BP; 8 A; 1 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 1451 ATCCATCTTCTCTCA 1465  
Db 17 ATCCATCTTCTCTCA 3  
  
RESULT 2147  
AAS18424/c  
ID AAS18424 standard; DNA; 17 BP.  
XX  
AC AAS18424;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
XX Degenerate PCR primer #2 used to amplify DNA encoding human chkl.  
DE  
XX Human; checkpoint protein; hchk1; DNA damage; chromosome 11q24;  
KW cell cycle checkpoint pathway; inhibition of cell growth; tumour;  
KW malignancy; growth deficiency; development deficiency; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX US6307015-B1.  
XX  
XX 23-OCT-2001.  
XX  
XX 12-JAN-2000; 2000US-00488364.  
XX  
XX 05-SEP-1997; 97US-00924183.  
XX  
XX (BAYU ) BAYLOR COLLEGE MEDICINE.  
XX  
XX Elledge SJ, Sanchez Y;  
XX  
XX WPI; 2002-040207/05.  
XX

PT New mammalian checkpoint protein and gene, for generating specific  
PT antibodies or for inhibiting the growth of cells, and for use as a probe  
PT for a portion of a chromosome associated with tumors or malignancies.

XX Example 1; Col 24; 39pp; English.

CC The present invention relates to the isolation of human and mouse  
CC checkpoint (chk1) proteins and the nucleic acid sequences encoding them.  
CC Human chk1 (hchk1) maps to chromosome 11q24. Chk1 is involved in cellular  
CC responses to DNA damage, in the cell cycle checkpoint pathway. The  
CC protein is useful for generating specific antibodies and for inhibiting  
CC the growth of cells. The nucleotide sequence encoding the protein may be  
CC used as a probe for a portion of the chromosome associated with tumors  
CC and other malignancies, as well as growth and/or development  
CC deficiencies. The present sequence represents a degenerate PCR primer  
CC used to amplify DNA encoding human chk1 protein

XX Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCC 1047

Db 17 GACTTTGGCCTGGCC 3

RESULT 2148

ABK57291

ID ABK57291 standard; RNA; 17 BP.

AC ABK57291;

DT 02-JUL-2002 (first entry)

DE Human CLCA1 gene enzymatic nucleic acid #1662.

XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
XX chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
XX oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
XX acetylcysteine.

OS Homo sapiens.

PN WO200211674-A2.

PD 14-FEB-2002.

PF 09-AUG-2001; 2001WO-US024970.

PR 09-AUG-2000; 2000US-0224383P.

PA (RIBO-) RIBOZYME PHARM INC.

PA (SYNT) SYNTEX USA LLC.

PA (THOM/) THOMPSON J.

PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

PI Grupe A;

DR WPI; 2002-217145/27.

XX Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.

PS Claim 4; Page 110; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic

CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention

XX Sequence 17 BP; 8 A; 4 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 605 AACTGGAGACCTACA 619

Db 1 AACUUGAGACCUACA 15

RESULT 2149

ABK56866

ID ABK56866 standard; RNA; 17 BP.

AC ABK56866;

DT 02-JUL-2002 (first entry)

DE Human CLCA1 gene enzymatic nucleic acid #1237.

XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
XX chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
XX oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
XX acetylcysteine.

OS Homo sapiens.

PN WO200211674-A2.

PD 14-FEB-2002.

PF 09-AUG-2001; 2001WO-US024970.

PR 09-AUG-2000; 2000US-0224383P.

PA (RIBO-) RIBOZYME PHARM INC.

PA (SYNT) SYNTEX USA LLC.

PA (THOM/) THOMPSON J.

PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

PI Grupe A;

DR WPI; 2002-217145/27.

XX Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.

PS Claim 4; Page 84; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or

CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 80.8%; Pred. NO. 1.1e+03;  
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 604 AACTGGAGACCTAC 618  
||||: |||||: ||  
Db 3 AATCUGAGACCUAC 17

RESULT 2150  
ABK56439  
ID ABK56439 standard; RNA; 17 BP.  
XX  
AC ABK56439;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #810.  
XX  
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT) SYNTEX USA LLC.  
PA (THOM/) THOMPSON J.  
XX  
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
DR WPI; 2002-217145/27.  
XX  
PT Enzymatic polynucleotide that down regulates expression of chloride  
XX channel calcium activated gene, useful for treating Chronic obstructive  
XX pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 71; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The

CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 73.3%; Pred. NO. 1.1e+03;  
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1577 GCAGGCCAGCTTCC 1591  
||||: |||||: ||  
Db 2 GCAGGCCAGCUUUC 16

RESULT 2151  
ABK57129  
ID ABK57129 standard; RNA; 17 BP.  
XX  
AC ABK57129;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #1500.  
XX  
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT) SYNTEX USA LLC.  
PA (THOM/) THOMPSON J.  
XX  
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
DR WPI; 2002-217145/27.  
XX  
PT Enzymatic polynucleotide that down regulates expression of chloride  
XX channel calcium activated gene, useful for treating Chronic obstructive  
XX pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 96; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The



CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
SQ Sequence 17 BP; 2 A; 6 C; 4 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 73.3%; Pred. No. 1.1e+03;  
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
QY 1577 GCAGGCCAGCTTCC 1591  
Db 1 GCAGGCCAGCUUUC 15  
RESULT 2152  
ABK57182  
ID ABK57182 standard; RNA; 17 BP.  
XX  
AC ABK57182;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #1553.  
XX  
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT) SYNTAX USA LLC.  
PA (THOM/) THOMPSON J.  
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
DR WPI; 2002-217145/27.  
XX  
PT Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 98; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an

CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 8 A; 5 C; 3 G; 0 T; 1 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 1.1e+03;  
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
QY 672 AAGCAAGCTCAGCA 686  
Db 3 AAGCAAGCTCAGCAAA 17  
RESULT 2153  
ABK55967  
ID ABK55967 standard; RNA; 17 BP.  
XX  
AC ABK55967;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #338.  
XX  
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT) SYNTAX USA LLC.  
PA (THOM/) THOMPSON J.  
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
DR WPI; 2002-217145/27.  
XX  
PT Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 59; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
XX  
SQ Sequence 17 BP; 7 A; 6 C; 2 G; 0 T; 2 U; 0 Other;

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Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 1.1e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 673 AGCAAGCTCACAGC 687
Db 1 AGCAAGCUCACAAAC 15

RESULT 2154
ACN00811
ID ACN00811 standard; RNA; 17 BP.
XX AC
AC ACN00811;
XX AC
DT 22-APR-2004 (first entry)
XX
DE WNV Hammerhead Ribozyme substrate SEQ ID NO 801.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocardiitis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
PI WPI; 2002-706994/76.
XX
DR
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 801; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocardiitis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, inozyme, G-cleaver, DNazyme, Amberzyme and zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 7 A; 6 C; 2 G; 0 T; 2 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 890 ACATCATCAACATGC 904
Db 1 ACATCATCAACATGC 904

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Db 2 ACAACAUCACAUUGC 16

RESULT 2155
ACN13778
ID ACN13778 standard; RNA; 17 BP.
XX AC
AC ACN13778;
XX AC
DT 22-APR-2004 (first entry)
XX
DE WNV minus strand DNazyme substrate SEQ ID NO 13781.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocardiitis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
PI WPI; 2002-706994/76.
XX
DR
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 13781; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocardiitis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, inozyme, G-cleaver, DNazyme, Amberzyme and zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 6 A; 9 C; 2 G; 0 T; 0 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 429 CAACATCCCCCAGC 443
Db 3 CAACCAACCCCCAGC 17

RESULT 2156
ACN08355/C
ID ACN08355 standard; RNA; 17 BP.
XX

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AC ACN08355;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 8358.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 8358; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 2 A; 1 C; 6 G; 0 T; 8 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 1.1e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 890 ACATCATCAACATGC 904
XX 17 ACATCATCAACATGC 3
XX
XX RESULT 2157
XX ACN12834/c
XX ID ACN12834 standard; RNA; 17 BP.
XX
XX ACN12834;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Zinzyme substrate SEQ ID NO 12837.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX

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KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 12837; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 4 A; 8 C; 3 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 1.1e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1638 GCAGCGGCTGGAGGG 1652
XX 16 GCAGCGGCTGGAGTG 2
XX
XX RESULT 2158
XX ACN04167
XX ID ACN04167 standard; RNA; 17 BP.
XX
XX ACN04167;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Zinzyme substrate SEQ ID NO 4170.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX

```



DR WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus

PT (WNV), useful for treating a condition related to WNV infection e.g.

PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX Claim 23; SEQ ID NO 11884; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication

CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for

CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,

CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid

CC molecule is selected from the group of ribozymes consisting of

CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The

CC nucleic acid molecules further comprise at least five ribose residues, at

CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at

CC least three of the 5' terminal nucleotides and a 3' end modification of a

CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080

CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given

CC in the specification. The present sequence is that of a nucleic acid

CC molecule of the invention

XX

SEQ Sequence 17 BP; 4 A; 4 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 878 ATGACTGTGGGAACA 892

DB 17 ATGACTGTGGGAACA 3

RESULT 2161

ACN01704

ID ACN01704 standard; RNA; 17 BP.

AC ACN01704;

AC ACN01704;

DT 22-APR-2004 (first entry)

XX WNV Inozyme substrate SEQ ID NO 1694.

DE WNV Inozyme substrate SEQ ID NO 1694.

XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;

KW virucide; neuroprotective; antibacterial; replication; pancreatitis;

KW encephalitis; myocarditis; meningitis; infection; hepatitis;

KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;

KW Amberzyme; Zinzyme; ss.

XX

OS West Nile Virus.

XX WO200268637-A2.

PN WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

PI WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus

PT (WNV), useful for treating a condition related to WNV infection e.g.

PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX Claim 23; SEQ ID NO 1694; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication

CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for

CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,

CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid

CC molecule is selected from the group of ribozymes consisting of

CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The

CC nucleic acid molecules further comprise at least five ribose residues, at

CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at

CC least three of the 5' terminal nucleotides and a 3' end modification of a

CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080

CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given

CC in the specification. The present sequence is that of a nucleic acid

CC molecule of the invention

XX

SEQ Sequence 17 BP; 4 A; 2 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 73.3%; Pred. No. 1.1e+03;

Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 877 GATGACTGTGGGAAC 891

DB 3 GAUGACUGUGGAAC 17

RESULT 2162

ACN00210

ID ACN00210 standard; RNA; 17 BP.

AC ACN00210;

AC ACN00210;

DT 22-APR-2004 (first entry)

XX WNV Hammerhead Ribozyme substrate SEQ ID NO 200.

DE WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;

KW virucide; neuroprotective; antibacterial; replication; pancreatitis;

KW encephalitis; myocarditis; meningitis; infection; hepatitis;

KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;

KW Amberzyme; Zinzyme; ss.

XX

OS West Nile Virus.

XX WO200268637-A2.

PN WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

PI WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus

PT (WNV), useful for treating a condition related to WNV infection e.g.

PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX Claim 23; SEQ ID NO 200; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication

CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for

CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,

CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid

CC molecule is selected from the group of ribozymes consisting of

CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyne. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention  
XX  
SQ Sequence 17 BP; 7 A; 2 C; 4 G; 0 T; 4 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 73.3%; Pred. No. 1.1e+03;  
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
QY 878 ATGACTGTGGGAACA 892  
DB 1 AUGACUGUGGAACA 15  
RESULT 2163  
ACN02575  
ID ACN02575 standard; RNA; 17 BP.  
XX  
AC ACN02575;  
XX  
DT 22-APR-2004 (first entry)  
DE WNV Inozyme substrate SEQ ID NO 2578.  
XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyne; ss.  
XX  
OS West Nile Virus.  
XX  
PN WO200268637-A2.  
XX  
PD 06-SEP-2002.  
XX  
PF 19-OCT-2001; 2001WO-US048350.  
XX  
PR 20-OCT-2000; 2000US-0242411P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
PI Blatt L, Mcswiggen JA;  
XX  
DR WPI; 2002-706994/76.  
XX  
PT New nucleic acid molecule that modulates replication of West Nile Virus  
PT (WNV), useful for treating a condition related to WNV infection e.g.  
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
PS Claim 23; SEQ ID NO 2578; 495pp; English.  
XX  
CC The invention relates to nucleic acid molecules that modulate replication  
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyne. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

CC molecule of the invention  
XX  
SQ Sequence 17 BP; 2 A; 4 C; 8 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 1.1e+03;  
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
QY 1638 GCAGCGGCTGGAGGG 1652  
DB 1 GCAGCGGCTGGAGUG 15  
RESULT 2164  
ACN14682/C  
ID ACN14682 standard; RNA; 17 BP.  
XX  
AC ACN14682;  
XX  
DT 22-APR-2004 (first entry)  
DE WNV minus strand Amberzyme substrate SEQ ID NO 14685.  
XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyne; ss.  
XX  
OS West Nile Virus.  
XX  
PN WO200268637-A2.  
XX  
PD 06-SEP-2002.  
XX  
PF 19-OCT-2001; 2001WO-US048350.  
XX  
PR 20-OCT-2000; 2000US-0242411P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
PI Blatt L, Mcswiggen JA;  
XX  
DR WPI; 2002-706994/76.  
XX  
PT New nucleic acid molecule that modulates replication of West Nile Virus  
PT (WNV), useful for treating a condition related to WNV infection e.g.  
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
PS Claim 23; SEQ ID NO 14685; 495pp; English.  
XX  
CC The invention relates to nucleic acid molecules that modulate replication  
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyne. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention  
XX  
SQ Sequence 17 BP; 2 A; 2 C; 6 G; 0 T; 7 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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OY 890 ACATCATCAACATGC 904
    ||| ||| ||| ||| |||
Db 16 ACAACATCAACATGC 2

RESULT 2165
ACN02546
ID ACN02546 standard; RNA; 17 BP.
XX
AC ACN02546;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Inozyme substrate SEQ ID NO 2549.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW viricide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
XX WPI: 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 2549; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 8 A; 6 C; 1 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 890 ACATCATCAACATGC 904
    ||| ||| ||| ||| |||
Db 1 ACAACATCAACATGC 15

RESULT 2166
ACN02546
ID ACN02546 standard; RNA; 17 BP.
XX
AC ACN02546;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Inozyme substrate SEQ ID NO 2549.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW viricide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
XX WPI: 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 2549; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 8 A; 6 C; 1 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 890 ACATCATCAACATGC 904
    ||| ||| ||| ||| |||
Db 1 ACAACATCAACATGC 15

RESULT 2166
ACN02546
ID ACN02546 standard; RNA; 17 BP.
XX
AC ACN02546;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Inozyme substrate SEQ ID NO 2549.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW viricide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
XX WPI: 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 11885; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 5 A; 6 C; 2 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 877 GATGACTGTGGGAC 891
    ||| ||| ||| ||| |||
Db 15 GATGACTGTGGGAC 1

RESULT 2167
ABT35689/c
ID ABT35689 standard; DNA; 17 BP.
XX
XX ABT35689;
AC ABT35689;
XX
XX 12-JUN-2003 (first entry)
XX
```

DE Tumour suppression related human fukutin oligo SEQ ID No 1326.  
 XX  
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003025175-A2.  
 XX  
 XX 27-MAR-2003.  
 PD  
 XX  
 PF 17-SEP-2002; 2002WO-IB004208.  
 XX  
 PR 17-SEP-2001; 2001FR-00011978.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX Teberman A, Amson R, Tuijnder M;  
 PI  
 XX WPI; 2003-313353/30.  
 DR  
 XX  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 PT  
 XX  
 PS Disclosure; Page 188; 720pp; French.  
 PS  
 XX  
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 3 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1527 TCAGCTACAAAGGA 1541  
 Db ||||| ||||| |||||  
 17 TCAGCAACAAAGGA 3  
 RESULT 2168  
 ACA06589/c  
 ID ACA06589 standard; RNA; 17 BP.  
 AC ACA06589;  
 XX  
 XX 03-JUN-2003 (first entry)  
 DT  
 XX NFKB sub-unit modulating inozyme substrate #408.  
 DB  
 XX

KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;  
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX US2002177568-A1.  
 XX  
 XX 28-NOV-2002.  
 PD  
 XX  
 XX 23-MAY-2001; 2001US-00864785.  
 PF  
 XX 07-DEC-1992; 92US-00987132.  
 PR  
 PR 18-MAY-1994; 94US-00245466.  
 PR  
 PR 15-AUG-1994; 94US-00291932.  
 PR  
 PR 23-DEC-1996; 96US-00777916.  
 XX  
 XX (STIN/) STINCHOMB D T.  
 PA  
 PA (MCSW/) MCSWIGGEN J.  
 PA (DRAP/) DRAPER K G.  
 PA  
 XX Stinchcomb DT, Mcswiggen J, Draper KG;  
 PI  
 XX WPI; 2003-340953/32.  
 DR  
 XX  
 PT Novel enzymatic nucleic acid molecules which down regulates expression of  
 PT a sequence encoding a subunit of nuclear factor kappa B useful for  
 PT treating cancer, inflammatory disorders and autoimmune diseases.  
 PT  
 XX Claim 3; Page 33; 72pp; English.  
 PS  
 CC The invention describes an enzymatic nucleic acid molecule (I) which down  
 CC regulates expression of a sequence encoding a subunit of nuclear factor  
 CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme  
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
 CC cancer and is useful for down-regulating REL-A activity in a cell for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity,  
 CC autoimmunity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury  
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents the substrate of a novel enzymatic  
 CC nucleic acid molecule  
 XX  
 SQ Sequence 17 BP; 3 A; 3 C; 6 G; 0 T; 5 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 142 ATCAACGGCAGCTG 156



```
Db      16 ATCAAACTGCAGCTG 2
RESULT 2169
ACA07774/c
ID      ACA07774 standard; RNA; 17 BP.
AC      ACA07774;
XX
XX
XX      03-JUN-2003 (first entry)
DT
XX
XX      NFKB sub-unit modulating zinzyme substrate #173.
DE
XX
XX      Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW      G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW      lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW      oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW      cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW      lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW      chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW      cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW      gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW      rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW      gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW      transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW      allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
XX      Homo sapiens.
OS
XX
XX      US2002177568-A1.
PN
XX
XX      28-NOV-2002.
PD
XX
XX      23-MAY-2001; 2001US-00864785.
PF
XX
XX      07-DEC-1992; 92US-00987132.
PR
XX      18-MAY-1994; 94US-00245466.
PR
XX      15-AUG-1994; 94US-00291932.
PR
XX      23-DEC-1996; 96US-00777916.
XX
XX      (STIN/) STINCHOMB D T.
PA      (MCSW/) MCSWIGGEN J.
PA      (DRAP/) DRAPER K G.
XX
XX      Stinchcomb DT, Mcswiggen J, Draper KG;
PI
XX
XX      WPI; 2003-340953/32.
DR
XX
XX      Novel enzymatic nucleic acid molecules which down regulates expression of
PT      a sequence encoding a subunit of nuclear factor kappa B useful for
PT      treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX      Claim 3; Page 40; 72pp; English.
XX
XX      The invention describes an enzymatic nucleic acid molecule (I) which down
CC      regulates expression of a sequence encoding a subunit of nuclear factor
CC      kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC      configuration. The enzymatic nucleic acid molecule is adapted to treat
CC      cancer and is useful for down-regulating REL-A activity in a cell, for
CC      treating a patient having a condition associated with the level of REL-A.
CC      (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC      the presence of a divalent cation, especially Mg2+. The enzymatic and
CC      antisense nucleic acid molecules are useful for treating breast, lung,
CC      prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC      cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC      multidrug resistant cancer. The method involves use of other drug
CC      therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC      chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC      cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC      gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC      acid molecules are also useful for treating inflammatory disease such as
CC      rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
```

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CC      obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC      rejection, gene therapy applications, ischaemia/reperfusion injury
CC      (central nervous system (CNS) and myocardial), glomerulonephritis,
CC      sepsis, allergic airway inflammation, inflammatory bowel disease or
CC      infection. This sequence represents the substrate of a novel enzymatic
CC      nucleic acid molecule
XX
XX      Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;
SQ
Query Match      0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY      142 ATCAACGGCAGCTG 156
DB      15 ATCAAACTGCAGCTG 1
AC
AC      ACA08921;
XX
XX      03-JUN-2003 (first entry)
DT
XX
XX      NFKB sub-unit modulating amberzyme substrate #84.
DE
XX
XX      Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW      G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW      lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW      oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW      cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW      lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW      chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW      cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW      gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW      rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW      gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW      transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW      allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
XX      Homo sapiens.
OS
XX
XX      US2002177568-A1.
PN
XX
XX      28-NOV-2002.
PD
XX
XX      23-MAY-2001; 2001US-00864785.
PF
XX
XX      07-DEC-1992; 92US-00987132.
PR
XX      18-MAY-1994; 94US-00245466.
PR
XX      15-AUG-1994; 94US-00291932.
PR
XX      23-DEC-1996; 96US-00777916.
XX
XX      (STIN/) STINCHOMB D T.
PA      (MCSW/) MCSWIGGEN J.
PA      (DRAP/) DRAPER K G.
XX
XX      Stinchcomb DT, Mcswiggen J, Draper KG;
PI
XX
XX      WPI; 2003-340953/32.
DR
XX
XX      Novel enzymatic nucleic acid molecules which down regulates expression of
PT      a sequence encoding a subunit of nuclear factor kappa B useful for
PT      treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX      Claim 3; Page 51; 72pp; English.
XX
XX      The invention describes an enzymatic nucleic acid molecule (I) which down
CC      regulates expression of a sequence encoding a subunit of nuclear factor
CC      kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC      configuration. The enzymatic nucleic acid molecule is adapted to treat
CC      cancer and is useful for down-regulating REL-A activity in a cell, for
CC      treating a patient having a condition associated with the level of REL-A.
CC      (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC      the presence of a divalent cation, especially Mg2+. The enzymatic and
CC      antisense nucleic acid molecules are useful for treating breast, lung,
CC      prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC      cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC      multidrug resistant cancer. The method involves use of other drug
CC      therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC      chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC      cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC      gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC      acid molecules are also useful for treating inflammatory disease such as
CC      rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
```

CC cancer and is useful for down-regulating REL-A activity in a cell, for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, retinosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury  
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents the substrate of a novel enzymatic  
 CC nucleic acid molecule

XX  
 SQ Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 66.7%; Pred. No. 1.1e+03;  
 Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 539 CCATCTTTGACAAAGC 553  
 DB 1 CCAUCUUGACAAUC 15  
 |||:|||||  
 |||:|||||

RESULT 2171  
 ABZ65140/c  
 ID ABZ65140 standard; RNA; 17 BP.

XX AC ABZ65140;

XX DT 21-MAR-2003 (first entry)

XX DE Human HER2 DNzyme substrate #597.

XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
 KW anti-rheumatic; cancer; AIDS; ss.

XX OS Homo sapiens.

XX PN W0200297114-A2.

XX PD 05-DEC-2002.

XX PF 29-MAY-2002; 2002WO-US016840.

XX PR 29-MAY-2001; 2001US-0294140P.

XX PR 06-JUN-2001; 2001US-0296249P.

XX PR 10-SEP-2001; 2001US-0318471P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Mcswiggen J;

XX XX WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for  
 XX treating cancer, modulates the expression of a nucleic acid encoding  
 XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX PS Claim 4; Page 144; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
 CC rheumatic activity. The nucleic acid molecules are useful for reducing  
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
 CC ribozymes of the invention

XX SQ Sequence 17 BP; 2 A; 5 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGTGG 941  
 DB 16 CCAGCTGCACCGTGG 2  
 |||:|||||  
 |||:|||||

RESULT 2172

ABZ61477/c

ID ABZ61477 standard; RNA; 17 BP.

XX AC ABZ61477;

XX DT 21-MAR-2003 (first entry)

XX DE Human H-Ras DNzyme target #268.

XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
 KW anti-rheumatic; cancer; AIDS; ss.

XX OS Homo sapiens.

XX PN W0200297114-A2.

XX PD 05-DEC-2002.

XX PF 29-MAY-2002; 2002WO-US016840.

XX PR 29-MAY-2001; 2001US-0294140P.

XX PR 06-JUN-2001; 2001US-0296249P.

XX PR 10-SEP-2001; 2001US-0318471P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Mcswiggen J;

XX XX WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for  
 XX treating cancer, modulates the expression of a nucleic acid encoding  
 XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX PS Claim 58; Page 116; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
 CC rheumatic activity. The nucleic acid molecules are useful for reducing  
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
 CC ribozymes of the invention

XX SQ Sequence 17 BP; 1 A; 8 C; 7 G; 0 T; 1 U; 0 Other;

```
Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 80 GGCCCGCGGCTCTG 94
DB 16 GGCCCGCGGCTCTG 2

RESULT 2173
ABZ62006/c
ID ABZ62006 standard; RNA; 17 BP.
XX AC ABZ62006;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNazyme target #797.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX Claim 58; Page 126; 185pp; English.
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX Sequence 17 BP; 3 A; 8 C; 4 G; 0 T; 2 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 752 GGGAAGTGCCCTGC 766
DB 15 GGGAAGTGCCCTGC 1

RESULT 2174
ABZ62005/c
ID ABZ62005 standard; RNA; 17 BP.
XX AC ABZ62005;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNazyme target #796.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
```

```
ABZ64791
ID ABZ64791 standard; RNA; 17 BP.
XX AC ABZ64791;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNazyme substrate #248.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX Claim 4; Page 137; 185pp; English.
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX Sequence 17 BP; 2 A; 5 C; 6 G; 0 T; 4 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 1.1e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 49 CCAGCAGTGCTGCTG 63
DB 3 CCAGCUGUGACUG 17

RESULT 2175
ABZ62005/c
ID ABZ62005 standard; RNA; 17 BP.
XX AC ABZ62005;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNazyme target #796.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
```

KW anti-rheumatic; cancer; AIDS; ss.  
 XX Homo sapiens.  
 OS WO200297114-A2.  
 PN 05-DEC-2002.  
 PD 29-MAY-2002; 2002WO-US016840.  
 XX 29-MAY-2001; 2001US-0294140P.  
 XX 06-JUN-2001; 2001US-0296249P.  
 PR 10-SEP-2001; 2001US-0318471P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA Mcswiggen J;  
 XX WPI; 2003-140484/13.  
 DR Novel short interfering RNA and enzymatic nucleic acid useful for  
 PT treating cancer, modulates the expression of a nucleic acid encoding  
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
 XX Claim 58; Page 126; 185pp; English.  
 PS The invention relates to a novel short interfering RNA (siRNA) nucleic  
 XX acid molecule or an enzymatic nucleic acid molecule, that modulates  
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
 CC rheumatic activity. The nucleic acid molecules are useful for reducing  
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
 CC ribozymes of the invention  
 XX Sequence 17 BP; 3 A; 8 C; 4 G; 0 T; 2 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 752 GGGAGGTGTCCTGC 766  
 ||| |||||  
 DB 17 GGGAGGTGTCCTGC 3  
 RESULT 2176  
 ACID64604  
 ID ACD64604 standard; RNA; 17 BP.  
 XX ACD64604;  
 AC 30-SEP-2003 (first entry)  
 XX HCV minus strand DNzyme substrate sequence #1627.  
 DE Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 XX RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozymes; DNzyme; inozyme; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX Hepatitis C virus.  
 OS WO200281494-A1.  
 XX

PD 17-OCT-2002.  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX 26-MAR-2001; 2001US-00817879.  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORE/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEEP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 DR Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX Claim 1; Page 304; 387pp; English.  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,  
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC DNzyme or minus strand DNzyme sequences disclosed in the present  
 CC invention  
 XX Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 1434 AGAGGATGCCATGAA 1448  
 |||||:|:|:|  
 DB 2 AGAGGATGCCAUGCA 16  
 RESULT 2177  
 ACD55495/c  
 ID ACD55495 standard; RNA; 17 BP.  
 XX ACD55495;  
 AC 23-SEP-2003 (first entry)  
 XX HBV amberyne substrate sequence #79.  
 DE Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 XX RNA stability; RNA expression; RNA synthesis; antisense;  
 KW

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.

OS Hepatitis B virus.

PN WO200281494-A1.

PD 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.

PR 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.

PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.

PA (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

PI Draper K, Roberts E;

XX WPI; 2003-229207/22.

XX Novel compound useful for treating cirrhosis, liver failure,

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

XX Example 1; Page 204; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening

CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and

CC methods of the invention are useful for the treatment of degenerative and

CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HBV

CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences

CC disclosed in the present invention

XX Sequence 17 BP; 6 A; 2 C; 5 G; 0 T; 4 U; 0 Other;

SQ

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e-03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 532 AATAGCCCCATCTTT 546

DB 15 AATATCCCCATCTTT 1

||||| |||||||

RESULT 2178

ACD55494/C

ID ACD55494 standard; RNA; 17 BP.

AC ACD55494;

XX 23-SEP-2003 (first entry)

XX HBV amberyne substrate sequence #78.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

OS Hepatitis B virus.

PN WO200281494-A1.

PD 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.

PR 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.

PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.

PA (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

PI Draper K, Roberts E;

XX WPI; 2003-229207/22.

XX Novel compound useful for treating cirrhosis, liver failure,

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

XX Example 1; Page 204; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening

CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and

CC methods of the invention are useful for the treatment of degenerative and

CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HBV

CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences

CC disclosed in the present invention

XX Sequence 17 BP; 7 A; 1 C; 5 G; 0 T; 4 U; 0 Other;

SQ

Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 532 AATAGCCCCATCTTT 546  
DB 16 AATATCCCCATCTTT 2

RESULT 2179  
ACD58065/c  
ID ACD58065 standard; RNA; 17 BP.  
XX  
AC ACD58065;  
XX  
DT 23-SEP-2003 (first entry)  
XX  
DE HCV DNAzyme substrate sequence #651.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
XX WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Claim 1; Page 245; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,  
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HCV  
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present  
CC invention  
XX  
SQ Sequence 17 BP; 3 A; 5 C; 4 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1434 AGAGGATGCCATGAA 1448  
DB 17 AGAGGATGCCATGCA 3

RESULT 2180  
ACD64603  
ID ACD64603 standard; RNA; 17 BP.  
XX  
AC ACD64603;  
XX  
DT 30-SEP-2003 (first entry)  
XX  
DE HCV minus strand DNAzyme substrate sequence #1626.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
XX WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX



OS	Hepatitis B virus.
XX	
PN	W0200281494-A1.
XX	
PD	17-OCT-2002.
XX	
PF	26-MAR-2002; 2002WO-US009187.
XX	
PR	26-MAR-2001; 2001US-00817879.
PR	08-JUN-2001; 2001US-00877478.
PR	08-JUN-2001; 2001US-0296876P.
PR	24-OCT-2001; 2001US-0335059P.
PR	05-DEC-2001; 2001US-0337055P.
XX	(RIBO-) RIBOZYME PHARM INC.
PA	(BLAT/) BLATT L.
PA	(MACE/) MACEJAK D.
PA	(MCSW/) MCSWIGGEN J.
PA	(NORR/) MORRISSEY D.
PA	(PAVC/) PAVCO P.
PA	(LEEP/) LEE P.
PA	(DRAP/) DRAPER K.
PA	(ROBE/) ROBERTS E.
XX	
PI	Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI	Draper K, Roberts E;
XX	
DR	WPI; 2003-229207/22.
XX	
PT	Novel compound useful for treating cirrhosis, liver failure,
FT	hepatocellular carcinoma, or condition associated with hepatitis C virus
PT	infection.
XX	
PS	Example 1; Page 184; 387pp; English.
XX	
CC	The present invention relates to nucleic acid molecules which modulate
CC	the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC	Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC	and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC	ribozymes, zinczymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC	are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC	transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC	as oligonucleotides that specifically bind the Enhancer I region of HBV
CC	DNA. The nucleic acids may be used to modulate the expression of HBV
CC	genes and HBV viral replication. Also disclosed is a method for screening
CC	compounds and/or potential therapies directed against HBV, and compounds
CC	that modulate the expression and/or replication of HCV. The compounds and
CC	methods of the invention are useful for the treatment of degenerative and
CC	disease states related to HBV and HCV infection, replication and gene
CC	expression such as cirrhosis, liver failure, and hepatocellular
CC	carcinoma. The present sequence represents a substrate for one of the HBV
CC	ribozyme, incyzyme, G-cleaver, zinczyme, DNazyme or amberzyme sequences
CC	disclosed in the present invention
XX	
SQ	Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;
	Query Match 0.8%; Score 13.4; DB 1; Length 17;
	Best Local Similarity 66.7%; Pred. No. 1.1e+03;
	Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps
OY	1390 CTCACCAAGCTGTG 1404   :           :   :   2 CUCACCAACCGUUG 16
Db	
RESULT	2184
ACC64765/c	
ID	ACC64765 standard; DNA; 17 BP.
XX	
AC	ACC64765;
XX	
DT	01-JUL-2003 (first entry)
XX	



```

DE Murine oligonucleotide associated with tumour supression, SEQ ID 1012.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 266; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 1.1e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 244 GGCAGTGACCCCTGGA 258
XX ||||| ||||| |||||
XX 17 GGCAGTGCCCTGGA 3
XX
XX RESULT 2185
XX ACC66050
XX ID ACC66050 standard; DNA; 17 BP.
XX
XX AC ACC66050;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 3297.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
XX Mus musculus.
XX
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX

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XX
XX 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 416; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 2 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 1.1e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 826 TCCCTCACCCTGTC 840
XX ||||| ||||| |||||
XX 3 TCCCTCACCCTGTC 17
XX
XX RESULT 2186
XX ACC68168/C
XX ID ACC68168 standard; DNA; 17 BP.
XX
XX AC ACC68168;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 5415.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
XX Mus musculus.
XX
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 664; 738pp; French.
XX

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XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6886), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ Sequence 17 BP; 2 A; 10 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match      0.8%; Score 13.4; DB 1; Length 17;
  Best Local Similarity 93.3%; Pred. No. 1.1e+03;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1468 CTGGGGGAGGGATC 1482
Db 15 CTGGGGGAGGGATC 1

RESULT 2187
ABX16354/c
ID ABX16354 standard; DNA; 17 BP.
AC ABX16354;
XX
XX 08-APR-2003 (first entry)
DE Human checkpoint gene Chk1 PCR primer #2.
XX
XX Human; checkpoint; chk1; anti-Chk1 antibody; tumour; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002156247-A1.
XX
XX 24-OCT-2002.
XX
XX 12-DEC-2001; 2001US-00020038.
XX
XX 12-JAN-2000; 2000US-00488364.
XX
XX (ELLE/) ELLEDGE S J.
XX (SANC/) SANCHEZ Y.
XX
XX Elledge SJ, Sanchez Y;
XX
XX WPI; 2003-182651/18.
XX
XX New anti-Chk1 antibody, that may be a monoclonal or polyclonal antibody,
XX useful for detecting a Chk1 protein that is associated with a tumor.
XX
XX Example 1; Page 13; 28pp; English.
XX
XX The invention describes an anti-Chk1 antibody capable of specifically
XX binding to an antigenic determinant on the proteins encoded by a sequence
XX comprising 476 (3 sequences), 479, 496 or 513 amino acids. A new method
XX is used to produce the antibody, which is useful for detecting a Chk1
XX protein that is associated with a tumour. This sequence represents a PCR
XX primer used to isolate DNA encoding the human checkpoint protein Chk1
XX
SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match      0.8%; Score 13.4; DB 1; Length 17;
  Best Local Similarity 93.3%; Pred. No. 1.1e+03;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCC 1047
Db 17 GACTTTGGCCTGTCC 3

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RESULT 2188
ADC37957
ID ADC37957 standard; DNA; 17 BP.
XX
XX ADC37957;
XX
XX 18-DEC-2003 (first entry)
DT
DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:306.
XX
XX human; angiominotin-like protein 1; AMLP1; cytostatic; gene therapy;
XX AMLP1a; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO2003037931-A2.
XX
XX 08-MAY-2003.
XX
XX 01-NOV-2002; 2002WO-US035129.
XX
XX 01-NOV-2001; 2001US-0334773P.
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
XX Shannon M, Phan T;
XX
XX WPI; 2003-430501/40.
XX
XX New isolated nucleic acid molecule encoding a human angiominotin-like
XX protein, useful for treating or preventing a disorder associated with
XX decreased or increased expression or activity of AMLP1.
XX
XX Example 2; SEQ ID NO 306; 172pp; English.
XX
XX The present invention describes the human angiominotin-like protein 1
XX (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene
XX therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and
XX compositions of the present invention can be used for treating or
XX preventing a disorder associated with decreased or increased expression
XX or activity of AMLP1. The present sequence represents a scanning
XX oligonucleotide for human AMLP1a, which is used in an example from the
XX present invention.
XX
SQ Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match      0.8%; Score 13.4; DB 1; Length 17;
  Best Local Similarity 93.3%; Pred. No. 1.1e+03;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 856 AAGGACCTGAAGCAG 870
Db 1 AAGGAACTGAAGCAG 15

RESULT 2189
ADC37955
ID ADC37955 standard; DNA; 17 BP.
XX
XX ADC37955;
XX
XX 18-DEC-2003 (first entry)
DT
DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:304.
XX
XX human; angiominotin-like protein 1; AMLP1; cytostatic; gene therapy;
XX AMLP1a; ss.
XX
XX Synthetic.
XX Homo sapiens.

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XX WO2003037931-A2.  
XX 08-MAY-2003.  
XX  
XX 01-NOV-2002; 2002WO-US035129.  
XX  
XX 01-NOV-2001; 2001US-0334773P.  
XX  
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.  
XX Shannon M, Phan T;  
XX WPI; 2003-430501/40.  
XX  
XX New isolated nucleic acid molecule encoding a human angiominotin-like  
PT protein, useful for treating or preventing a disorder associated with  
PT decreased or increased expression or activity of AMLP1.  
XX  
XX Example 2; SEQ ID NO 304; 172pp; English.  
XX  
XX The present invention describes the human angiominotin-like protein 1  
CC (AMLPI). human AMLPI has cytostatic activity, and can be used in gene  
CC therapy. The AMLPI protein, nucleic acid molecules, antibodies, and  
CC compositions of the present invention can be used for treating or  
CC preventing a disorder associated with decreased or increased expression  
CC or activity of AMLPI. The present sequence represents a scanning  
CC oligonucleotide for human AMLPIa, which is used in an example from the  
CC present invention.  
XX  
XX Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 856 AAGGACCTGAAGCAG 870  
Db 3 AAGGAAGCTGAAGCAG 17  
RESULT 2190  
ID ADC37956 standard; DNA; 17 BP.  
AC ADC37956;  
XX 18-DEC-2003 (first entry)  
XX Human AMLPIa scanning 17-mer oligonucleotide SEQ ID NO:305.  
XX human; angiominotin-like protein 1; AMLPI; cytostatic; gene therapy;  
XX AMLPIa; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO2003037931-A2.  
XX  
XX 08-MAY-2003.  
XX  
XX 01-NOV-2002; 2002WO-US035129.  
XX  
XX 01-NOV-2001; 2001US-0334773P.  
XX  
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.  
XX Shannon M, Phan T;  
XX WPI; 2003-430501/40.  
XX  
XX New isolated nucleic acid molecule encoding a human angiominotin-like  
PT protein, useful for treating or preventing a disorder associated with

PT decreased or increased expression or activity of AMLPI.  
XX Example 2; SEQ ID NO 305; 172pp; English.  
XX  
XX The present invention describes the human angiominotin-like protein 1  
CC (AMLPI). human AMLPI has cytostatic activity, and can be used in gene  
CC therapy. The AMLPI protein, nucleic acid molecules, antibodies, and  
CC compositions of the present invention can be used for treating or  
CC preventing a disorder associated with decreased or increased expression  
CC or activity of AMLPI. The present sequence represents a scanning  
CC oligonucleotide for human AMLPIa, which is used in an example from the  
CC present invention.  
XX  
XX Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 856 AAGGACCTGAAGCAG 870  
Db 2 AAGGAAGCTGAAGCAG 16  
RESULT 2191  
ID ADI47583 standard; DNA; 17 BP.  
XX ADI47583;  
XX 15-APR-2004 (first entry)  
XX Human tumour suppression/reversion-related DNA sequence SeqID86.  
XX  
XX tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;  
KW primer; PCR; gene chip; antisense; viral disease; tumour;  
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.  
XX Homo sapiens.  
XX WO2003025177-A2.  
XX 27-MAR-2003.  
XX 17-SEP-2002; 2002WO-IB004523.  
XX 17-SEP-2001; 2001FR-00011980.  
XX (MOLE-) MOLECULAR ENGINES LAB.  
XX Telerman A, Amson R, Tuijnder M;  
XX WPI; 2003-313354/30.  
XX  
XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumours and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
XX Disclosure; SEQ ID NO 86; 30pp; French.  
XX  
XX This invention relates to novel isolated nucleic acid sequences involved  
CC in the phenomena of tumour suppression, tumour reversion, apoptosis  
CC and/or resistance to viruses. The invention may be useful for the  
CC development of compounds with a cytostatic, virucide, neuroprotective,  
CC nootropic or neuroleptic activity. The DNA sequences may be useful as  
CC probes and primers for detecting, identifying, quantifying and/or  
CC amplifying nucleic acid, for example as one component of a gene chip, in  
CC vitro as antisense reagents and for production of recombinant  
CC polypeptides. The invention may therefore be useful for preparation of  
CC pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration, The  
CC specifically cancer but also Alzheimer's disease and schizophrenia. The



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XX OS Unidentified.
XX OS
XX PN WO200281628-A2.
XX PD
XX PF 17-OCT-2002.
XX PF
XX PF 03-APR-2002; 2002WO-US010512.
XX PR
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI
XX PI Blatt L, Chowrira B, Haeberli P, McSwiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX DR
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
XX PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS
XX PS Claim 59; SEQ ID NO 1888; 317pp; English.
XX CC
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX CC that down regulate the expression or inhibit the function of a receptor
XX CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX CC invention are useful for treating: cerebrovascular accident, central
XX CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX CC disease, lupus, multiple sclerosis, transplant/graft rejection,
XX CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX CC nucleic acids of the invention are also useful for down-regulating the
XX CC expression of a target gene and as a diagnostic tool to examine genetic
XX CC drifts and mutations within diseased cells or to detect the presence of a
XX CC target RNA in a cell. The present RNA sequence represents a human IKK-
XX CC gamma substrate sequence.
XX SQ Sequence 17 BP; 5 A; 4 C; 7 G; 0 T; 1 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. NO. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 923 TGTTCACGCTGCTCC 937
Db 17 TGCTCCAGCTGCTCC 3

RESULT 2195
ADL47582/c
ID ADL47582 standard; RNA; 17 BP.
XX AC
XX AC ADL47582;
XX DT
XX DT 20-MAY-2004 (first entry)
XX DE
XX DE Human IKK-gamma substrate sequence #92.
XX KW
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX KW protein kinase PKR; cerebrovascular accident;
XX KW central nervous system injury; CNS injury; spinal cord injury; cancer;
XX KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX KW restenosis; asthma; Crohn's disease; diabetes; obesity;
XX KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX KW substrate; ds.

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XX OS Unidentified.
XX OS
XX PN WO200281628-A2.
XX PD
XX PF 17-OCT-2002.
XX PF
XX PF 03-APR-2002; 2002WO-US010512.
XX PR
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI
XX PI Blatt L, Chowrira B, Haeberli P, McSwiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX DR
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
XX PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS
XX PS Claim 59; SEQ ID NO 1115; 317pp; English.
XX CC
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX CC that down regulate the expression or inhibit the function of a receptor
XX CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX CC invention are useful for treating: cerebrovascular accident, central
XX CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX CC disease, lupus, multiple sclerosis, transplant/graft rejection,
XX CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX CC nucleic acids of the invention are also useful for down-regulating the
XX CC expression of a target gene and as a diagnostic tool to examine genetic
XX CC drifts and mutations within diseased cells or to detect the presence of a
XX CC target RNA in a cell. The present RNA sequence represents a human IKK-
XX CC gamma substrate sequence.
XX SQ Sequence 17 BP; 1 A; 10 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. NO. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 30 GCAGAGGTAGGCAGG 44
Db 16 GGAGAGGTAGGCAGG 2

RESULT 2196
ADL47973/c
ID ADL47973 standard; RNA; 17 BP.
XX AC
XX AC ADL47973;
XX DT
XX DT 20-MAY-2004 (first entry)
XX DE
XX DE Human IKK-gamma substrate sequence #483.
XX KW
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX KW protein kinase PKR; cerebrovascular accident;
XX KW central nervous system injury; CNS injury; spinal cord injury; cancer;
XX KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX KW restenosis; asthma; Crohn's disease; diabetes; obesity;
XX KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX KW substrate; ds.

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XX OS Unidentified.
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS Claim 59; SEQ ID NO 1506; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX SQ Sequence 17 BP; 1 A; 10 C; 2 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 32 AGAGGTAGGCGAGG 46
DB 16 AGAGGTAGGCGAGGG 2

RESULT 2197
ADL48767/C
ID ADL48767 standard; RNA; 17 BP.
XX AC ADL48767;
XX DT 20-MAY-2004 (first entry)
XX DE Human IKK-gamma substrate sequence #1277.
XX antisease oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX substrate; ds.

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XX OS Unidentified.
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS Claim 59; SEQ ID NO 2300; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX SQ Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTC 936
DB 15 CTGCTCCAGCTGCTC 1

RESULT 2198
ADF92273/C
ID ADF92273 standard; DNA; 17 BP.
XX AC ADF92273;
XX DT 26-FEB-2004 (first entry)
XX DE Human cyokeratin 19-derived F3 PCR primer - SEQ ID 361.
XX human; cyokeratin; CK; LAMP; loop mediated isothermal amplification;
XX tumour metastasis; prostate cancer; lymphoma; human; CK19; ss; primer;
XX PCR; F3.
XX Homo sapiens.
XX WO2003097878-A1.
XX 27-NOV-2003.
XX

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PF 20-MAY-2003; 2003WO-JF006256.
XX
PR 21-MAY-2002; 2002JP-00145689.
PR 17-JUN-2002; 2002JP-00175271.
PR 09-JUL-2002; 2002JP-00199759.
XX
XX (SYSM-) SYSMEX CORP.
PA
PI Tada S, Akai Y, Imura Y, Abe S, Minekawa H;
XX WPI; 2004-012543/01.
DR
XX
XX LAMP nucleic acid amplification primers for detection of cytokeratin
PT expression as indicator in diagnosis of tumour metastasis.
PT
XX
XX Claim 19; SEQ ID NO 361; 266pp; Japanese.
XX
XX The invention relates to novel nucleic acid amplification primers for the
CC detection of human cytokeratin (CK) 18, 19 or 20 expression by the LAMP
CC (loop mediated isothermal amplification) method. The primers of the
CC invention may be useful for the detecting cytokeratin 18-20 expression as
CC an indicator for the diagnosis of tumour metastasis, particularly
CC prostate cancer and lymphoma. The amplification using the primers is
CC highly efficient and allows very sensitive detection of tumour
CC metastasis. The current sequence is that of the human CK19-related PCR
CC primer of the invention.
XX
XX Sequence 17 BP; 4 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1573 TCAGGCGAGCCAGCT 1587
DB ||||| ||||| |||||
15 TCAGGTAGCCAGCT 1
RESULT 2199
ADH70710/c
ID ADH70710 standard; DNA; 17 BP.
XX
XX ADH70710;
AC
XX
XX
XX 25-MAR-2004 (first entry)
XX Human Vbeta gene repeat sequence #500.
XX human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; db.
XX
XX Homo sapiens.
OS
XX
XX US2002150891-A1.
PN
XX
XX 17-OCT-2002.
PD
XX
XX 05-MAR-1999; 99US-00263959.
XX
XX 19-SEP-1994; 94US-00309335.
XX 19-SEP-1995; 95US-00531241.
XX
XX (HOOD/) HOOD L E.
PA

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PA (ROWE/) ROWEN L.
XX
XX Hood LE, Rowen L;
XX
XX WPI; 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.
XX
XX Disclosure; SEQ ID NO 904; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers
CC specifically priming and allowing amplification of each Vbeta gene,
CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune diseases, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases,
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies, Type II hypersensitivities such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.
XX
XX Sequence 17 BP; 6 A; 11 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 231 TGGTGGTGGTGGCGG 245
DB ||||| ||||| |||||
17 TGGTGGTGGTGGTGG 3
RESULT 2200
ADM60139/c
ID ADM60139 standard; RNA; 17 BP.
XX
XX ADM60139;
AC
XX
XX 03-JUN-2004 (first entry)
XX
XX Hepatitis B virus (HBV) RNA target sequence #2273.
XX
XX Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX Hepatitis B virus.
OS
XX
XX US2004054156-A1.
PN
XX
XX 18-MAR-2004.
PD
XX
XX 15-JAN-2003; 2003US-00342902.
XX
XX 14-MAY-1992; 92US-00882712.
XX 07-FEB-1994; 94US-00193627.
XX 08-NOV-1999; 99US-00436430.
XX 20-MAR-2000; 2000US-00531025.
XX 09-AUG-2000; 2000US-00636385.
XX

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PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
XX
XX (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
XX Draper K, Blatt L, Mcswiggen JA, Morrissey D;
PI WPI; 2004-247781/23.
XX
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
XX Disclosure; SEQ ID NO 2273; 122pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX Sequence 17 BP; 7 A; 1 C; 5 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 532 AATAGCCCCCATCTTT 546
Db 16 AATATCCCCCATCTTT 2
RESULT 2201
ADM58657
ID ADM58657 standard; RNA; 17 BP.
XX
XX ADM58657;
AC
XX 03-JUN-2004 (first entry)
DT
XX Hepatitis B virus (HBV) RNA target sequence #791.
DE
XX Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX Hepatitis B virus.
OS
XX US2004054156-A1.
PN
XX 18-MAR-2004.
PD
XX 15-JAN-2003; 2003US-00342902.
PF
XX 14-MAY-1992; 92US-00882712.
PR 07-FEB-1994; 94US-00193627.
PR 08-NOV-1999; 99US-00436430.
PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.
PR 24-OCT-2000; 2000US-00696347.
PR
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```
PR 08-JUN-2001; 2001US-00877478.
XX
XX (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
XX Draper K, Blatt L, Mcswiggen JA, Morrissey D;
PI WPI; 2004-247781/23.
XX
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
XX Disclosure; SEQ ID NO 791; 122pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX Sequence 17 BP; 4 A; 7 C; 2 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 1.1e+03;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 1390 CTCACCAAGCTGTG 1404
Db 3 CUCACCAACCCGUG 17
RESULT 2202
ADM60138/c
ID ADM60138 standard; RNA; 17 BP.
XX
XX ADM60138;
AC
XX 03-JUN-2004 (first entry)
DT
XX Hepatitis B virus (HBV) RNA target sequence #2272.
DE
XX Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX Hepatitis B virus.
OS
XX US2004054156-A1.
PN
XX 18-MAR-2004.
PD
XX 15-JAN-2003; 2003US-00342902.
PF
XX 14-MAY-1992; 92US-00882712.
PR 07-FEB-1994; 94US-00193627.
PR 08-NOV-1999; 99US-00436430.
PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.
PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
PR
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XX PA (DRAP/) DRAPER K.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PA (MORR/) MORRISSEY D.
XX PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX DR WPI; 2004-247781/23.
XX
XX PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX PT specifically cleaving RNA derived from hepatitis B virus and comprising
XX PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX PS Disclosure; SEQ ID NO 2272; 122pp; English.
XX
XX CC The invention relates to an enzymatic nucleic acid molecule that
XX CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX CC comprising one or more binding arms, without requiring the presence of a
XX CC 2'-OH group within the molecule for activity. The nucleic acids are
XX CC useful for treating hepatitis B virus infection, hepatitis,
XX CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX CC combination with other therapies such as lamivudine and interferons. The
XX CC nucleic acids are useful as diagnostic tools to examine genetic drift and
XX CC mutations within diseased cells, for detecting the presence of HBV RNA in
XX CC a cell, for the study of RNA and for down-regulating gene expression of
XX CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX CC sequence represents an HBV RNA target sequence, used in the scope of the
XX CC invention. Note: The sequence data for this patent is also available in
XX CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX SQ Sequence 17 BP; 8 A; 0 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 532 AATAGCCCCATCTTT 546
Db 17 AATATCCCCATCTTT 3

RESULT 2203
ADM60140/c
ID ADM60140 standard; RNA; 17 BP.
XX
XX AC ADM60140;
XX
XX DT 03-JUN-2004 (first entry)
XX
XX DE Hepatitis B virus (HBV) RNA target sequence #2274.
XX
XX KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
XX KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
XX KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX OS Hepatitis B virus.
XX
XX PN US2004054156-A1.
XX
XX PD 18-MAR-2004.
XX
XX PF 15-JAN-2003; 2003US-00342902.
XX
XX PR 14-MAY-1992; 92US-00882712.
XX PR 07-FEB-1994; 94US-00193627.
XX PR 08-NOV-1999; 99US-00436430.
XX PR 20-MAR-2000; 2000US-00531025.
XX PR 09-AUG-2000; 2000US-00636385.
XX PR 24-OCT-2000; 2000US-00696347.
XX PR 08-JUN-2001; 2001US-00877478.
XX
XX PA (DRAP/) DRAPER K.

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PA (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
XX PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX DR WPI; 2004-247781/23.
XX
XX PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX PT specifically cleaving RNA derived from hepatitis B virus and comprising
XX PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX PS Disclosure; SEQ ID NO 2274; 122pp; English.
XX
XX CC The invention relates to an enzymatic nucleic acid molecule that
XX CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX CC comprising one or more binding arms, without requiring the presence of a
XX CC 2'-OH group within the molecule for activity. The nucleic acids are
XX CC useful for treating hepatitis B virus infection, hepatitis,
XX CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX CC combination with other therapies such as lamivudine and interferons. The
XX CC nucleic acids are useful as diagnostic tools to examine genetic drift and
XX CC mutations within diseased cells, for detecting the presence of HBV RNA in
XX CC a cell, for the study of RNA and for down-regulating gene expression of
XX CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX CC sequence represents an HBV RNA target sequence, used in the scope of the
XX CC invention. Note: The sequence data for this patent is also available in
XX CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX SQ Sequence 17 BP; 6 A; 2 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 532 AATAGCCCCATCTTT 546
Db 15 AATATCCCCATCTTT 1

RESULT 2204
ADM59729
ID ADM59729 standard; RNA; 17 BP.
XX
XX AC ADM59729;
XX
XX DT 03-JUN-2004 (first entry)
XX
XX DE Hepatitis B virus (HBV) RNA target sequence #1863.
XX
XX KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
XX KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
XX KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX OS Hepatitis B virus.
XX
XX PN US2004054156-A1.
XX
XX PD 18-MAR-2004.
XX
XX PF 15-JAN-2003; 2003US-00342902.
XX
XX PR 14-MAY-1992; 92US-00882712.
XX PR 07-FEB-1994; 94US-00193627.
XX PR 08-NOV-1999; 99US-00436430.
XX PR 20-MAR-2000; 2000US-00531025.
XX PR 09-AUG-2000; 2000US-00636385.
XX PR 24-OCT-2000; 2000US-00696347.
XX PR 08-JUN-2001; 2001US-00877478.
XX
XX PA (DRAP/) DRAPER K.

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PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
PA (MORR/) MORRISSEY D.  
XX  
PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;  
XX  
DR WPI; 2004-247781/23.  
XX  
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes  
PT specifically cleaving RNA derived from hepatitis B virus and comprising  
PT one or more binding arms, useful for treating hepatitis and cirrhosis.  
XX  
XX Disclosure; SEQ ID NO 1863; 122pp; English.  
XX  
XX The invention relates to an enzymatic nucleic acid molecule that  
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and  
CC comprising one or more binding arms, without requiring the presence of a  
CC 2'-OH group within the molecule for activity. The nucleic acids are  
CC useful for treating hepatitis B virus infection, hepatitis,  
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in  
CC combination with other therapies such as lamivudine and interferons. The  
CC nucleic acids are useful as diagnostic tools to examine genetic drift and  
CC mutations within diseased cells, for detecting the presence of HBV RNA in  
CC a cell, for the study of RNA and for down-regulating gene expression of  
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This  
CC sequence represents an HBV RNA target sequence, used in the scope of the  
CC invention. Note: The sequence data for this patent is also available in  
CC electronic format from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html).  
XX  
XX Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 66.7%; Pred. No. 1.1e+03;  
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;  
QY 1390 CTCACCAAGCTGTTG 1404  
DB :||||| |::|  
2 CUCACCAACCGUUG 16  
RESULT 2205  
AD183405/C  
ID AD183405 standard; RNA; 17 BP.  
AC  
XX  
XX AD183405;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE HCV DNzyme substrate sequence #651.  
XX  
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
KW HCV infection; type I interferon; DNzyme.  
XX  
XX Hepatitis C virus.  
OS  
XX  
XX US2003125270-A1.  
FN  
XX  
XX 03-JUL-2003.  
XX  
XX 18-DEC-2000; 2000US-00740332.  
PF  
XX  
XX 18-DEC-2000; 2000US-00740332.  
PR  
XX  
XX (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (ROBE/) ROBERTS E.  
PA (PAVC/) PAVCO P A.  
PA (MACE/) MACEJACK D.  
XX  
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
PI  
XX WPI; 2004-031273/03.  
DR  
XX  
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived  
PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
PT especially in combination with type I interferon therapy.  
XX  
XX Claim 1; SEQ ID NO 3903; 198pp; English.  
PS  
XX The invention relates to an enzymatic nucleic acid molecule which  
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
CC the binding arms of the enzymatic nucleic acid molecule comprises  
CC sequences complementary to any of the defined substrate sequences given  
CC in the specification. The nucleic acid molecule may be administered for  
CC the treatment of HCV infections, especially in combination with type I  
CC interferons. The present sequence represents a HCV DNzyme substrate  
CC sequence.  
XX  
XX Sequence 17 BP; 3 A; 5 C; 4 G; 0 T; 5 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1434 AGAGGATGCCATGAA 1448  
DB ||||| |||||  
17 AGAGGATGCCATGCA 3  
RESULT 2206  
AD186657  
ID AD186657 standard; RNA; 17 BP.  
AC  
XX  
XX AD186657;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE HCV DNzyme substrate sequence #3903.  
XX  
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
KW HCV infection; type I interferon; DNzyme.  
XX  
XX Hepatitis C virus.  
OS  
XX  
XX US2003125270-A1.  
FN  
XX  
XX 03-JUL-2003.  
XX  
XX 18-DEC-2000; 2000US-00740332.  
PF  
XX  
XX 18-DEC-2000; 2000US-00740332.  
PR  
XX  
XX (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (ROBE/) ROBERTS E.  
PA (PAVC/) PAVCO P A.  
PA (MACE/) MACEJACK D.  
XX  
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
PI  
XX WPI; 2004-031273/03.  
DR  
XX  
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived  
PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
PT especially in combination with type I interferon therapy.  
XX  
XX Claim 1; SEQ ID NO 3903; 198pp; English.  
PS  
XX The invention relates to an enzymatic nucleic acid molecule which  
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
CC the binding arms of the enzymatic nucleic acid molecule comprises  
CC sequences complementary to any of the defined substrate sequences given  
CC in the specification. The nucleic acid molecule may be administered for  
CC the treatment of HCV infections, especially in combination with type I  
CC interferons. The present sequence represents a HCV DNzyme substrate  
CC sequence.

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XX SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1432 GCAGAGGATGCCATG 1446
DB 2 GGAGAGGAGGCCAUG 16

RESULT 2207
ADI86658
ID ADI86658 standard; RNA; 17 BP.
XX AC ADI86658;
XX DT 03-JUN-2004 (first entry)
XX DE HCV DNase substrate sequence #3904.
XX KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX KW HCV infection; type I interferon; DNase.
XX OS Hepatitis C virus.
XX PN US2003125270-A1.
XX PD 03-JUL-2003.
XX PF 18-DEC-2000; 2000US-00740332.
XX PR 18-DEC-2000; 2000US-00740332.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (ROBE/) ROBERTS E.
XX PA (PVC/) PAVCO P A.
XX PA (MACE/) MACEJACK D.
XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX WPI; 2004-031273/03.
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX Claim 1; SEQ ID NO 3904; 198pp; English.
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNase substrate
XX sequence.
XX SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1434 AGAGATGCCATGAA 1448
DB 2 AGAGGAGGCCAUGCA 16

RESULT 2208
AAT50714
XX SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 60.0%; Pred. No. 1.1e+03;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCC 1042
DB 3 UGGCUGACUUGUCC 17

10017621-3sl.rng
AAT50714 standard; RNA; 18 BP.
AAT50714;
07-MAR-1997 (first entry)
Rabbit CETP hairpin ribozyme target sequence #588.
Hairpin ribozyme; cholesterol ester transfer protein; mRNA cleavage;
neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
reverse cholesterol transport; high density lipoprotein; therapy; CETP;
familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
LDL; ss.
Oryctolagus cuniculus.
W09620279-A1.
04-JUL-1996.
11-DEC-1995; 95WO-US016000.
23-DEC-1994; 94US-00363240.
(RIBO-) RIBOZYME PHARM INC.
(WARN) WARNER LAMBERT CO.
Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C, Page M;
WPI; 1996-321852/32.
New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
useful for preventing or treating initial development, progression or
regression of vascular diseases, esp. familial hypercholesterolaemia.
Claim 4; Page 55; 72pp; English.
AAT50699-T50754 represent target sequences for the rabbit cholesterol
ester transfer protein (CETP) hairpin ribozymes (see AAT50643-T50698).
CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer
between plasma lipoproteins. The numbering of the targets refers to the
position of the cleavage site in full length CETP. The ribozyme then
binds to 4-6 nucleotides 5', and a variable number 3' of this site. The
ribozymes are able to cleave mRNA from the gene encoding CETP, thereby
blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the
reverse cholesterol transport (RCT) pathway can be inhibited (or
eliminated) thereby preventing the reduction in size density of the high
density lipoproteins (HDL), prolonging HDL half life, and therefore
increasing HDL levels. The ribozymes can be used to treat conditions
associated with abnormal levels of CETP, specifically atherosclerosis,
peripheral vascular disease, hyperbetalipoproteinaemia, dyslipidaemia,
familial hypercholesterolaemia, hypoalphalipoproteinaemia, vascular
complications of diabetes, transplant, atherectomy and angioplastic
restenosis. By inhibiting CETP, the levels of HDL and low density
lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a
decrease in LDL levels, and a corresponding increase in HDL levels). The
ribozymes can also be used diagnostically to study genetic drift and
mutations in diseased cells, and to detect CETP mRNA. As the ribozymes
target specific regions of the CETP gene, they have low non-specific
activity
XX SQ Sequence 18 BP; 3 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 60.0%; Pred. No. 1.1e+03;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCC 1042
DB 3 UGGCUGACUUGUCC 17

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XX AAV73903;  
AC  
XX 02-MAR-1999 (first entry)  
DT  
XX  
XX Human HLA-A2 A\*0201 allele antisense PCR primer AL#U.  
XX  
XX HLA-A2; allele; A\*0201; PCR primer; polymorphic loci; subtyping;  
KW human leucocyte antigen; therapy; bone marrow transplant; vaccine;  
KW gene therapy; tumour cell; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX DE19715430-AL.  
PN  
XX 26-NOV-1998.  
PD  
XX  
XX 14-APR-1997; 97DE-01015430.  
PF  
XX 14-APR-1997; 97DE-01015430.  
PR  
XX (BOEF ) BOEHRINGER MANNHEIM GMBH.  
PA Schendel D, Gatz S;  
XX  
XX WPI; 1999-010501/02.  
DR  
XX Sub-typing complex polymorphic gene loci by amplification of multiple  
PT alleles - with individual alleles detected from combination of amplicons  
PT formed, specifically for typing HLA-A2 before bone marrow transplants or  
PT vaccination.  
XX  
XX Claim 8; Page 11; 18pp; German.  
PS  
XX AAV73887-V73911 are PCR primers used in a method for subtyping complex  
CC polymorphic loci in a DNA-containing sample, in which individual alleles  
CC are detected by multiple nucleic acid amplifications, a particular allele  
CC is identified from the combination of amplifications that produce  
CC amplicons from alleles present in the sample. The method is especially  
CC used to subtype the human leucocyte antigen (HLA)-A locus, particularly  
CC A2 and specifically to detect the A\*0201 allele. The method is applied  
CC before therapy, e.g. for subtyping bone marrow transplants, gene therapy  
CC vaccines, tumour cell vaccines, MHC carrier or peptide vaccines. The use  
CC of polymerase chain reaction (PCR) with sequence-specific primers to  
CC identify the most important alleles first (so that only rarer alleles  
CC require additional tests) reduces the number of experiments needed for  
CC subtyping. To identify an allele, a PCR reaction must occur, i.e. any  
CC negative result must be the result of experimental error and will not  
CC result in an incorrect subtype  
XX  
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 505 GAGGCTACCTGGAG 519  
DB 15 GAGGCTACCTGGAG 1  
RESULT 2211  
AAV738679  
ID AAV738679 standard; DNA; 18 BP.  
XX  
XX AAV738679;  
AC  
XX  
XX 10-SEP-1999 (first entry)  
DT  
XX Human chromosome 18q YAC clone primer.  
DE Human chromosome 18q; mood disorder; polymorphic marker; detection;  
XX  
KW

RESULT 2209  
AAV12786/c  
ID AAV12786 standard; DNA; 18 BP.  
XX  
XX AAV12786;  
AC  
XX 03-JUN-1998 (first entry)  
DT  
XX Patient-specific CDR2/CDR3 5' PCR primer LAR1 CDR3.  
DE  
XX Rearrangement; gene; immunoglobulin H; IGH; T cell receptor; TCR;  
KW clonotypic rearrangement; haematopoietic cell; monitor; response;  
KW haematological cancer; multiple myeloma; Hodgkin's disease;  
KW acute lymphoblastic leukaemia; test; bone marrow; autologous transplant;  
KW detection; clonotypic cell; premalignant; autoimmune; PCR primer; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX WO9746706-AL.  
PN  
XX 11-DEC-1997.  
PD  
XX 03-JUN-1997; 97WO-US009534.  
PF  
XX 03-JUN-1996; 96US-0019106P.  
PR  
XX (UYAI-) UNIV ALBERTA.  
PA  
XX Pilarski LM, Belch AR, Szczepek AJ;  
PI  
XX WPI; 1998-042212/04.  
DR  
XX Detecting specific clonotypic nucleic acid rearrangement in  
PT haematopoietic cells - used to monitor treatment of haematological cancer  
PT or to screen bone marrow transplants.  
XX  
XX Example 1; Page 43; 74pp; English.  
PS  
XX PCR primers AAV12776-86 are used for PCR, in situ reverse transcription  
CC PCR (RT-PCR) and RT-PCR. The rearrangement of immunoglobulin (Ig) H genes  
CC or the rearrangement of T cell receptor (TCR) genes in a clone is called  
CC its "clonotypic rearrangement". The primers are used to identify  
CC clonotypic nucleic acid rearrangements in haematopoietic cells from a  
CC patient with (or at risk of) a haematological neoplastic disease. A novel  
CC method is described to detect such clonotypic rearrangements. This method  
CC comprises isolating a neoplastic haematopoietic cell containing a target  
CC clonotypic rearrangement and amplifying a specific segment of the target.  
CC The amplified product is sequenced to determine if the clonotypic  
CC rearrangement is present. The method is especially used to monitor a  
CC patients' response to treatment of haematological cancer (e.g. multiple  
CC myeloma, Hodgkin's disease or acute lymphoblastic leukaemia). The method  
CC can also be used to test bone marrow samples, including stem cells,  
CC intended for autologous transplant. Other applications include detecting  
CC clonotypic cells in premalignant and autoimmune states, identifying cell  
CC types representative of the different stages in a malignant clone and  
CC development of therapies  
XX  
SQ Sequence 18 BP; 2 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 383 CCACGCTCTCGGATG 397  
DB 16 CCACGCTCTCGGAGG 2  
RESULT 2210  
AAV73903/c  
ID AAV73903 standard; DNA; 18 BP.

KW identification; trinucleotide repeat expansion; schizophrenia;  
 KW anxiety disorder; adjustment disorder; personality disorder;  
 KW nucleotide triplet repeat; ss.

OS Synthetic.

OS Homo sapiens.

PN WO9932643-A2.

XX 01-JUL-1999.

PF 17-DEC-1998; 98WO-EP008543.

XX 18-DEC-1997; 97GB-00026804.

PA (VLAAS) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.

PI Van Broeckhoven C, Raeymaekers P, Del-Favero J;

XX WPI; 1999-418934/35.

DR Detecting nucleotide triplet repeats in human chromosome 18q.

PT Disclosure; Page 56; 87pp; English.

XX The present invention describes detecting nucleotide triplet repeats in a  
 CC region of human chromosome 18q disposed between polymorphic markers  
 CC D18S68 and D18S979 to identify a human gene associated with a mood  
 CC disorder or related disorder. AAX88542 to AAX88705 represents human  
 CC chromosome 18q YAC clones and primers corresponding to them, used in the  
 CC exemplification of the present invention. YAC clones comprising a portion  
 CC of the region of human chromosome 18q between markers D18S68 and D18S979  
 CC are used to identify at least one human gene associated with a mood  
 CC disorder or related disorder. The mood disorder or related disorder, is  
 CC chosen from the Diagnostic and Statistical Manual of Mental Disorders,  
 CC version 4 (DSM-IV) taxonomy. This includes mood disorders (296.XX, 300.4,  
 CC 311, 301, 13, 295.70), schizophrenia and related disorders (295, 297.1,  
 CC 298.9, 297.3, 298.9), anxiety disorders (300.XX, 309.81, 308.3),  
 CC adjustment disorders (309.XX) and personality disorders (codes 301.XX).  
 CC Probes derived from genes associated with the mood disorder or related  
 CC disorder can be used to detect pathological mutations or genetic  
 CC variations in patients. The methods, probes and antibodies can be used to  
 CC determine the susceptibility of an individual to a mood disorder or  
 CC related disorder. The nucleic acids and proteins of the human gene can be  
 CC used to treat mood disorders and related disorders

SQ Sequence 18 BP; 2 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1705 CTGCTACCTGCTGCTG 1719

DB 2 CTGCTACCTGCTGCTG 16

RESULT 2212

AAX31848/c

ID AAX31848 standard; DNA; 18 BP.

XX AAX31848;

XX 24-JAN-2000 (first entry)

DE Human G-alpha-13 antisense inhibitor ISIS# 20804.

XX G-alpha-13; human; inhibitor; cancer; antisense compound; therapy; ss.

XX Synthetic.

OS Homo sapiens.

XX US5981732-A.

XX

PD

XX

PF

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09-NOV-1999.

04-DEC-1998; 98US-00205860.

04-DEC-1998; 98US-00205860.

(ISIS-) ISIS PHARM INC.

Cowser LM;

WPI; 1999-633376/54.

Antisense compound inhibiting expression of human G-alpha-13.

Claim 11; Col 40; 38pp; English.

This sequence represents an antisense inhibitor of the invention, and  
 inhibits the expression of the human G-alpha-13 protein. The antisense  
 compounds of the invention are of 8 to 30 nucleobases in length, that  
 inhibits the expression of the human G-alpha-13. The antisense compound  
 is useful for treating an animal, particularly humans, having or being  
 prone to a disease or condition associated with the expression of G-alpha  
 -13, such as cancer

Sequence 18 BP; 3 A; 3 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 810 TATCCACACGGAGAA 824

DB 18 TATCAACACGGAGAA 4

RESULT 2213

AAX79315

ID AAX79315 standard; DNA; 18 BP.

XX AAX79315;

DT 31-AUG-1999 (first entry)

DE Primer F72 for isolating human serotonin receptor splice variants.

Human; serotonin receptor; splice variant; alternative splicing; 5-HT4;  
 screening; ligand; central nervous system; CNS; disorder; expression;  
 gastrointestinal disorder; primer; amplification; ss.

OS Synthetic.

OS Homo sapiens.

PN FR2771741-A1.

PD 04-JUN-1999.

PF 28-NOV-1997; 97FR-00015037.

28-NOV-1997; 97FR-00015037.

(INRM ) INSEEM INST NAT SANTE & RECH MEDICALE.

Fischmeister R, Langlois M, Dahmoune Y, Gastineau M, Blondel O;  
 Hoebeke J;

WPI; 1999-349539/30.

Splice variants of human 5-HT4 receptor - and corresponding DNA, vectors,  
 antibodies, etc.

Example 1; Page 21; 58pp; French.

CC Primers AAX79310-X79315 were used to PCR amplify the human serotonin  
 CC receptor splice variants 5-HT-4(c) (AAX79306) and 5-HT-4(d) (AAX79307). 5  
 CC -HT4(c) and 5-HT4(d) receptor polypeptides can be used to screen for  
 CC substances, especially ligands, useful in the treatment of CNS disorders  
 CC associated with abnormal 5-HT4(c) receptor expression or gastrointestinal  
 CC disorders associated with abnormal 5-HT4(d) receptor expression  
 XX  
 SQ Sequence 18 BP; 7 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 766 CTCAGGAGCTCAAA 780  
 ||||| |||||  
 Db 1 CTCAGGAGCTCAAA 15

RESULT 2214  
 AAZ74421  
 ID AAZ74421 standard; DNA; 18 BP.  
 AC AAZ74421;  
 XX  
 DT 10-SEP-2001 (first entry)  
 XX  
 DE Human biallelic marker downstream amplification primer SEQ ID NO:8777.  
 DE  
 KW Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO954500-A2.  
 XX  
 PD 28-OCT-1999.  
 XX  
 PF 21-APR-1999; 99WO-IB000822.  
 XX  
 PR 21-APR-1998; 98US-0082614P.  
 PR 23-NOV-1998; 98US-0109732P.  
 XX  
 PA (GEST ) GENSET.  
 XX

PI Cohen D, Blumenfeld M, Chumakov I;  
 XX  
 XX WPI; 2000-013267/01.  
 XX  
 XX Novel biallelic markers used to construct a high density disequilibrium  
 XX map of the human genome.  
 XX  
 PS Claim 8; Page 2102; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
 CC invention, which contain a polymorphic base at position 24 of their  
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
 CC primers for the biallelic markers. The biallelic markers of the invention  
 CC have a variety of uses: they can be used for high density mapping of the  
 CC human genome, and in complex association studies and haplotyping studies  
 CC which are useful in determining the genetic basis for disease states.  
 CC Compositions and methods of the invention can also be useful for the  
 CC identification of the targets for the development of pharmaceutical  
 CC agents and diagnostic methods, as well as the characterisation of the  
 CC differential efficacious responses to and side effects from  
 CC pharmaceutical agents acting on a disease as well as other treatment.  
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 CC 3367, are not actually given a sequence in the Sequence Listing from the  
 CC present invention  
 XX  
 SQ Sequence 18 BP; 6 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1673 CAGCCCCCAACTACA 1687  
 ||||| |||||  
 Db 3 CAGCCCTCAACTACA 17

RESULT 2215  
 AAH40049/c  
 ID AAH40049 standard; DNA; 18 BP.  
 XX  
 AC AAH40049;  
 XX  
 DT 14-AUG-2001 (first entry)  
 XX  
 DE SNP specific upper PCR primer SEQ ID 2845.

XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
 KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;  
 KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;  
 KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
 KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
 KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
 XX  
 OS Homo sapiens.

XX WO200129262-A2.  
 XX  
 PD 26-APR-2001.  
 XX  
 PF 13-OCT-2000; 2000WO-US028436.  
 XX  
 PR 15-OCT-1999; 99US-0160096P.  
 XX  
 PA (ORCH-) ORCHID BIOSCIENCES INC.  
 XX  
 PI Picoult-Newburg L, Pohl M;  
 XX  
 DR WPI; 2001-290930/30.

XX New genotyping oligonucleotide, useful for detecting the presence,  
 XX absence or identity of single polynucleotide polymorphism in a nucleic  
 XX acid sample.

XX Claim 1; Page 64; 83pp; English.

XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
 CC primer extension (SNPE) primers, and the sequences of regions flanking  
 CC sites of single nucleotide polymorphisms SNPs. The present invention  
 CC includes kits for determining the presence or absence of a SNP, using the  
 CC oligonucleotides of the invention. The PCR primers are used to amplify a  
 CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
 CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
 CC performing a single-nucleotide primer extension reaction. The  
 CC oligonucleotides are useful for determining the presence, absence or  
 CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
 CC assess by association analysis the genotype of an individual or group of  
 CC individuals, having a pathological phenotypic trait suspected of being  
 CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
 CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
 CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
 CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
 CC traits also include symptoms of or susceptibility to multifactorial  
 CC disease of which a component is or may be genetic such as autoimmune  
 CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
 CC inflammation, cancer, nervous system diseases and infection by pathogenic  
 CC microorganism. The method is also useful in forensic investigations and  
 CC paternity analysis. The present sequence represents a PCR primer specific  
 XX for a human SNP containing DNA sequence

SQ Sequence 18 BP; 4 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 274 GCTGCTCTTGGGAA 288  
|||||

DB 18 GCTGCTCTTGGGAA 4

RESULT 2216  
ABK52758/c  
ID ABK52758 standard; DNA; 18 BP.  
XX  
AC ABK52758;  
XX  
DT 27-AUG-2002 (first entry)  
XX  
DE Nuclease resistant oligonucleotide.  
XX  
KW Nuclease resistant oligonucleotide; phosphinoamidite carboxylate;  
KW antiviral; anticancer; human T-lymphotropic virus; HTLV-I; HTLV-II;  
KW human immunodeficiency virus; HTLV-III; AIDS; HIV; influenza; mumps;  
KW measles; rhinovirus; dengue; rubella; rabies; hepatitis virus A;  
KW encephalitis virus; herpes virus; varicella-zoster virus; vaccinia;  
KW Epstein-Barr virus; human cytomegalovirus; papilloma virus; leukaemia;  
KW carcinoma; sarcoma; melanoma; carcinosarcoma; cell sarcoma;  
KW Hodgkins disease; acquired immune deficiency syndrome; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..18  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Optionally, phosphonoacetate,  
FT phosphonothioacetate, phosphorothioate or phosphodiester  
FT internucleotide linkages"  
PN WO200232912-A2.  
XX  
PD 25-APR-2002.  
XX  
PF 16-OCT-2001; 2001WO-US032465.  
XX  
PR 17-OCT-2000; 2000US-00691824.  
XX  
PA (DELL/) DELLINGER D J.  
XX  
PI Dellinger DJ;  
XX  
PS WPI; 2002-463302/49.  
XX  
PT New phosphinoamidite carboxylate derivatives useful in synthesis of  
PT oligonucleotides and for treating e.g. cancer and HIV.  
XX  
PS Example 38; Page 68; 104pp; English.  
XX  
CC The invention relates to new phosphinoamidite carboxylate derivatives  
CC (I). (I) are used for the synthesis of oligonucleotides. (I) are also  
CC used as antiviral or anticancer agents for the treatment of HTLV-I, HTLV-  
CC II, human immunodeficiency viruses, HTLV-III (AIDS virus), influenza type  
CC A, B and C, mumps, measles, rhinovirus, dengue, rubella, rabies,  
CC hepatitis virus A, encephalitis virus, herpes viruses (e.g. herpes  
CC simplex virus-1, herpes simplex virus-2, varicella-zoster virus, Epstein-  
CC Barr virus, human cytomegalovirus, human herpes virus 6, human herpes  
CC virus 7 and human herpes virus 8), vaccinia, papilloma virus, hepatitis  
CC virus B, leukaemias (e.g. acute lymphoblastic chronic lymphocytic, acute  
CC myeloblastic and chronic myelocytic leukemias), carcinoma (e.g. cervix,  
CC oesophagus, stomach, small intestines, colon and lungs), sarcomas (e.g.  
CC osteosarcoma, osteosarcoma, leproma, liposarcoma, hemangioma and  
CC hemangioendothelioma), melanomas (e.g. amelanotic and melanotic),  
XX

CC carcinosarcoma, lymphoid tissue type, follicular reticulum, cell sarcoma  
CC and Hodgkins disease. The synthesised oligonucleotide has reduced  
CC internucleotide charge and improved nuclease resistance. Synthesis of  
CC oligonucleotides is effected in high yielding coupling reactions at the  
CC phosphorous group as well as high yielding reactions at the carboxylate  
CC group, with the phosphorous-carboxylate group left intact. The present  
CC sequence represents a nuclease resistant oligonucleotide of the invention  
XX  
SQ Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1728 TCACCTGCCCACTTG 1742  
|||||

DB 17 TCACCAGCCCACTTG 3

RESULT 2217  
ABL44832/c  
ID ABL44832 standard; DNA; 18 BP.  
XX  
AC ABL44832;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome lp36-35 PCR primer SEQ ID NO:1876.  
XX  
KW Human; chromosome lp36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA ) RIKAGAKU KENKYUSHO.  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX  
PT Arraying genome clones.  
XX  
PS Claim 4; Page 41; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The  
CC method comprises: (a) clones of the genomic libraries contained in  
CC multiwell plates numbered for discrimination are mixed in each of the  
CC multiwell plates; (b) a primer designed based on the chromosome marker  
CC sequence is added to the mixture to carry out an amplification reaction;  
CC (c) a signal corresponding to the marker is detected from the resultant  
CC amplified product to specify the discrimination Nos. of the multiwell  
CC plates containing the clones having said marker sequence; (d) the order  
CC of the markers is changed so that the same discrimination Nos. succeed to  
CC the maximum in the specified discrimination Nos. to array the multiwell  
CC plates; (e) the clones in the multiwell plates of the specified  
CC discrimination Nos. are mixed respectively in each wells of longitudinal  
CC and lateral directions; (f) the mixed clones are cultured and the  
CC resultant cultures are amplified by using the above primer; (g) signals  
CC are detected from the amplified products; (h) the clones in the multiwell  
CC plates are specified from the detected result; and (i) the clones are  
CC reconstituted as the positions on the chromosome and arrayed. The  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
CC PCR primers for human chromosome lp36-35 DNA, and ABL45323 to ABL45634  
CC represent PCR primers for human chromosome 21q22.1, which are  
CC specifically claimed for use in the present invention  
XX

```
SQ Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
Query Match          0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 543 CTTTGACAGCCCT 557
DB 15 CTTGACAGCCCT 1

RESULT 2218
ABL94603
ID ABL94603 standard; DNA; 18 BP.
XX AC
XX ABL94603;
XX
DT 12-JUN-2002 (first entry)
XX DE
XX Rat VRI antisense oligonucleotide #45.
XX
XX Analgesic; antisenase; VRI; antinflammatory; uropathic; pain; cancer;
XX vanilloid receptor; antipruritic; cytostatic; antiasthmatic; pruritis;
XX gene therapy; tactile allodynia; urinary incontinence; inflammation; ss.
XX
XX Rattus sp.
XX OS
XX
XX WO200218407-A2.
XX PN
XX PD
XX 07-MAR-2002.
XX
XX 31-AUG-2001; 2001WO-EP010081.
XX PF
XX
XX 02-SEP-2000; 2000DE-01043674.
XX PR
XX 04-SEP-2000; 2000DE-01043702.
XX PR
XX (CHEF ) GRUENENTHAL GMBH.
XX PA
XX Kurreck J, Erdmann VA;
XX PI
XX WPI; 2002-281058/32.
XX DR
XX
XX New antisense oligonucleotides and ribozymes, useful for treating e.g.
XX pain and for diagnosis, are directed against mRNA for vanilloid-family
XX receptors.
XX
XX Claim 1; Fig 5; 76pp; German.
XX PS
XX
XX The present invention provides antisense sequences directed against the
XX VRI mRNA. These can be used in the treatment of pain, especially chronic,
XX heat-induced or inflammatory pain, tactile allodynia, urinary and
XX incontinence, neurogenic bladder symptoms, pruritis, tumours and
XX inflammation (particularly where associated with the VRI vanilloid
XX receptor such as asthma). They are also useful for identifying analgesic
XX agents. The present sequence is a VRI antisense sequence identified in
XX the invention
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match          0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1566 GCCTGACTCAGGAG 1580
DB 4 GCCTGACTCAGGAG 18

RESULT 2219
AAD44128
ID AAD44128 standard; DNA; 18 BP.
XX AC
XX AAD44128;

SQ Sequence 18 BP; 6 A; 2 C; 5 G; 3 T; 0 U; 2 Other;
Query Match          0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 77.8%; Pred. No. 1.1e+03;
Matches 14; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 856 AAGGACCTGAAGCAGTAC 873
DB 1 AAGGAYGTNAAGCAGTTC 18

RESULT 2220
ABX03808/c
ID ABX03808 standard; cDNA; 18 BP.
XX AC
XX ABX03808;
XX
XX 09-JAN-2003 (first entry)
XX DT
XX DNA encoding secreted protein signal peptide sequence #17.
XX DE
XX Differential display method; leucine-rich motif; transmembrane protein;
XX secreted protein; secreted protein signal peptide; ss.
XX KW
XX Unidentified.
XX OS
XX WO200259259-A2.
XX PN
XX 01-AUG-2002.
XX PD
XX 23-JAN-2002; 2002WO-IL000071.
XX PF
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XX PR 23-JAN-2001; 2001US-0263158F.  
XX PA (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.  
XX PI Wreschner DH;  
XX XX WPI; 2002-599769/64.  
XX DR P-PSDB; ABG98337.  
XX PT Differential display method for identifying secreted or transmembrane  
XX PT protein, comprises contacting a DNA with a first primer that hybridizes  
XX PT to a sequence coding for a leucine-rich motif and with a second  
XX PT oligonucleotide primer.  
XX PS Disclosure; Fig 2; 37pp; English.  
XX CC The invention relates to a differential display comprising contacting  
XX CC cDNA with a first primer that hybridizes to an oligonucleotide sequence  
XX CC coding for a leucine-rich motif, and with a second oligonucleotide primer  
XX CC to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from  
XX CC at least 2 samples, synthesizing cDNA from the RNA of each sample,  
XX CC contacting the cDNA with a first primer that hybridizes to an  
XX CC oligonucleotide sequence coding for a leucine-rich motif, and with a second  
XX CC oligonucleotide primer to form cDNA-hybrid molecules, amplifying the cDNA  
XX CC -hybrid molecules, detecting amplified products and comparing the  
XX CC amplified products from each sample to identify distinctive amplified  
XX CC products coding for at least one secreted or transmembrane protein. The  
XX CC method is useful for discovering novel secreted and/or transmembrane  
XX CC proteins which are important for cell processes and play an important  
XX CC role in determining its phenotype, and which act as mediators for the  
XX CC transfer of signals from external environment into the cell itself, thus  
XX CC modulating gene expression. Sequences ABX03792-ABX03869 represent DNA  
XX CC encoding secreted protein signal peptide sequences  
XX SQ Sequence 18 BP; 1 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 38 AGGCAGGAGGACCAG 52  
DB 18 AGTCAGGAGGACCAG 4  
RESULT 2221  
AAD52481  
ID AAD52481 standard; DNA; 18 BP.  
AC AAD52481;  
XX 02-MAY-2003 (first entry)  
XX DE Lolium perenne LpPKABAB cDNA sequencing forward primer 2.  
XX KW Abscisic acid-inducible and stress responsive protein; ASR; A22; PKABA;  
XX KW stress-inducible cysteine protease; late embryogenesis abundant protein;  
XX KW LEA; dehydrin; DHN; abscisic acid-induced protein kinase; gene therapy;  
XX KW CYS; seed development; plant tolerance; germination; plant protectant;  
XX KW ryegrass; primer; ss.  
XX OS Lolium perenne.  
XX XX WO200290547-A1.  
XX PN 14-NOV-2002.  
XX PD 07-MAY-2002; 2002WO-AU0000564.  
XX PF 07-MAY-2001; 2001AU-00004821.  
XX PR (AGRI-) AGRIC VICTORIA SERVICES PTY LTD.  
XX PA

PA (AGRE-) AGRESEARCH LTD.  
XX Spangenberg G, Sawbridge TI, Ong EK, Emmerling M;  
XX WPI; 2003-129183/12.  
XX DR New isolated nucleic acid encoding ASR, A22, CYS, LEA, DHN or PKABA  
XX PT proteins, useful as molecular genetic markers, and in modifying plant  
XX PT and/or seed development and responses to stresses and adverse  
XX PT environmental stimuli.  
XX XX Example 3; Page 29; 231pp; English.  
XX CC The invention relates to nucleic acid encoding abscisic acid-inducible  
XX CC and stress responsive proteins (ASR and A22), stress-inducible cysteine  
XX CC proteases (CYS), late embryogenesis abundant proteins (LEA), dehydrins  
XX CC (DHN) and abscisic acid-induced protein kinases (PKABA). The invention  
XX CC also relates to a method for modification of plant and seed development  
XX CC and plant responses to stresses and stimuli. The invention is useful as  
XX CC molecular genetic markers. The method is useful for modifying plant  
XX CC response to an environmental stimulus, modifying plant tolerance to  
XX CC abiotic, osmotic and/or temperature stresses, modifying seed dormancy  
XX CC and/or germination, development, maturation, and modifying a plant  
XX CC development process. They are also useful for modifying plant tolerance  
XX CC and adaptation to stresses and adverse environmental stimuli. The  
XX CC invention is also used in gene therapy. The present sequence is a primer  
XX CC used for sequencing Lolium perenne LpPKABAB cDNA  
XX SQ Sequence 18 BP; 2 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1577 GCAGCCAGCTTTC 1591  
DB 4 GCAGCCAGCTTTC 18  
RESULT 2222  
ABV77210  
ID ABV77210 standard; DNA; 18 BP.  
XX AC ABV77210;  
XX XX 28-MAR-2003 (first entry)  
XX DT PCR primer used to amplify consensus region A of hDOR cDNA.  
XX DE Delta-optoid receptor; hDOR; G-protein coupled receptor; GPCR array;  
XX KW ion-related disease; asthma; diabetes; AIDS; allergy; dermatitis;  
XX KW psoriasis; Alzheimer's disease; Parkinson's disease; arthritis; GPCR;  
XX KW depression; narcolepsy; infection; transplant rejection; lupus;  
XX KW hepatitis; autism; cancer; renal disorders; PCR; primer; ss.  
XX OS Homo sapiens.  
XX XX WO200295065-A2.  
XX PN 28-NOV-2002.  
XX PD 21-MAY-2002; 2002WO-DK000337.  
XX PF 18-MAY-2001; 2001DK-00000802.  
XX PR (AZIG-) AZIG BIOSCIENCE AS.  
XX PA Thirstrup K, Madsen LS, Jensen JB, Hummel R, Jensen BS;  
XX PI WPI; 2003-129439/12.  
XX DR New G-protein coupled receptor array comprising individual polynucleotide  
XX PT spots stably associated with a surface and a solid support useful for

PT determining the pathogenesis of different ion-related conditions or  
 PT diseases in humans.  
 XX  
 XX Example 2; Page 30; 43pp; English.  
 XX  
 CC PCR primers ABV77210-11 were used to amplify a consensus region of the  
 CC human delta-opioid receptor (hDOR). This opioid receptor belongs to the G  
 CC -protein coupled receptor (GPCR) family. The amplified fragment was used  
 CC to produce a GPCR array of the invention. The specification describes a  
 CC GPCR array comprising a multiplicity of individual polynucleotide spots  
 CC stably associated with a surface and a solid support. The individual GPCR  
 CC polynucleotide spot comprises a GPCR polynucleotide composition  
 CC consisting of a non-conserved region of a GPCR polynucleotide family member,  
 CC where the spots represent at least two different regions of a GPCR  
 CC polynucleotide family member. The GPCR array is useful for determining  
 CC the pathogenesis of different ion-related conditions or diseases in  
 CC humans, e.g. asthma, diabetes, AIDS, allergies, dermatitis, psoriasis,  
 CC Alzheimer's disease, Parkinson's disease, arthritis, depression,  
 CC narcolepsy, viral or parasitic infections, transplant rejection, lupus,  
 CC hepatitis, autism, cancer, renal disorders, etc  
 XX  
 XX Sequence 18 BP; 3 A; 9 C; 4 G; 2 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 18;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1099 TGGTACCGGCCCT 1113  
 ||| |||||  
 DB 2 TGGAACCGGCCCT 16

RESULT 2223  
 ADM92708/c  
 ID ADM92708 standard; DNA; 18 BP.  
 XX  
 XX ADM92708;  
 AC  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE SNP-containing cardiovascular associated gene primer #38.  
 XX  
 XX SNP; single nucleotide polymorphism; cardiovascular associated gene;  
 XX allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;  
 XX restenosis; arterial inflammation; myocardial infarction; stroke; primer;  
 XX ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2003057911-A2.  
 FN  
 XX 17-JUL-2003.  
 PD  
 XX 07-JAN-2003; 2003WO-EP0000060.  
 PF  
 XX 08-JAN-2002; 2002EP-00000153.  
 PR  
 XX (FARB ) BAYER AG.  
 PA  
 XX  
 XX Stropp U, Schwes S, Kallabis H;  
 PI  
 XX WPI; 2003-577532/54.  
 DR  
 XX  
 XX New isolated polynucleotides comprising single nucleotide polymorphisms  
 PT of the cardiovascular gene, useful for assessing predisposition or  
 PT susceptibility to a cardiovascular disease, e.g. atherosclerosis,  
 PT restenosis or stroke.  
 XX  
 XX Disclosure; Page 67; 187pp; English.  
 PS  
 XX The invention relates an isolated polynucleotide (I) encoded by a  
 CC cardiovascular associated (CA) gene, having allelic variation contained  
 CC in a functional surrounding like full length cDNA for CA gene

CC polypeptide, and with or without the CA gene promoter sequence. (I) is a  
 CC polynucleotide comprising single nucleotide polymorphisms predicting  
 CC cardiovascular disease. The polynucleotides are useful for assessing  
 CC predisposition or susceptibility to a cardiovascular disease, e.g.  
 CC atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial  
 CC inflammation, myocardial infarction, and stroke. These may also be used  
 CC to predict personal medication schemes omitting adverse drug reactions,  
 CC or as probes for detecting genetic polymorphisms and as templates for the  
 CC recombinant production of normal or variant peptides/polypeptides encoded  
 CC by the genes. This sequence corresponds to a PCR primer to amplify one of  
 CC the genes of the invention.  
 XX  
 XX Sequence 18 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 18;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1025 AGCTGGCTGACTTTG 1039  
 ||| |||||  
 DB 18 AGATGGCTGACTTTG 4

RESULT 2224  
 ADF77896  
 ID ADF77896 standard; DNA; 18 BP.  
 XX  
 XX ADF77896;  
 AC  
 XX 26-FEB-2004 (first entry)  
 DT  
 XX  
 DE Human EST clone antisense oligonucleotide #24.  
 XX  
 XX reporter construct; reporter element; effective analysis;  
 XX high-throughput; microtitre well format; light emission;  
 KW primary cell screening; low level mRNA expression; ss; human; antisense;  
 KW EST; expressed sequence tag.  
 XX  
 XX Synthetic.  
 OS  
 XX Homo sapiens.  
 OS  
 XX US2003124523-A1.  
 FN  
 XX 03-JUL-2003.  
 PD  
 XX 18-JUN-2001; 2001US-00883573.  
 XX  
 XX 22-JUN-2000; 2000US-0213132P.  
 PR  
 XX 07-FEB-2001; 2001US-0266949P.  
 XX  
 XX (ASSE/) ASSELBERGS F A M.  
 PA  
 XX (HALL/) HALL J.  
 PA  
 XX (HUES/) HUESKEN D.  
 PA  
 XX (KINZ/) KINZEL B.  
 PA  
 XX (NATT/) NATT F.  
 PA  
 XX (WEIL/) WEILER J.  
 XX  
 XX Asselbergs FAM, Hall J, Huesken D, Kinzel B, Natt F, Weiler J;  
 PI  
 XX WPI; 2004-009138/01.  
 DR  
 XX  
 XX Reporter construct, useful for identifying potential therapeutic oligo-  
 PT or poly-nucleotides, comprises target nucleic acid inserted 3' to a  
 PT reporter element.  
 PT  
 XX Example 4; Page 7; 22pp; English.  
 PS  
 XX The invention relates to a reporter construct (RC) comprises a reporter  
 CC element (RE) and a target nucleic acid, inserted 3' to RE, in the  
 CC untranslated region. RC are used to identify, particularly in screening  
 CC assays, oligo- or poly-nucleotides that modulate expression of a target  
 CC sequence, particularly antisense sequences and ribozymes, potentially  
 CC useful as pharmaceuticals. RC provide (a) effective analysis of

CC biological activity of many test sequences against specific targets; (b)  
 CC monitoring of mRNA levels without the cost and extensive pipetting  
 CC required in reverse transcription PCR; and (c) use of high-throughput,  
 CC microtitre well formats for screening with the reaction (light emission)  
 CC read directly from the wells, with exactly the same conditions for each  
 CC well (no need for a set of probes as in e.g. the Taqman assay). The  
 CC method is especially useful for screening primary cells (or other cells  
 CC that are difficult to obtain) or where target mRNA is expressed at very  
 CC low levels. The present sequence is used in the exemplification of the  
 CC present invention.

XX Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;  
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 988 CCCGAGACCTGCTC 1002  
 ||||| ||||| |||||  
 Db 2 CCCCTGACCTGCTC 16

RESULT 2225

AAQ31195  
 ID AAQ31195 standard; DNA; 19 BP.

XX AAQ31195;

AC AAQ31195;

DT 25-MAR-2003 (revised)

DT 23-MAR-1993 (first entry)

XX Alpha 6A integrin primer 1681.

DE Human; alpha 6A; integrin; cell surface receptor; adhesion;  
 KW extracellular matrix; cytoskeleton; heterodimer; laminin receptor;  
 KW alpha 3A; polymerase chain reaction; PCR; amplify; hamster; ss.

XX Synthetic.

XX WO9219647-A1.

XX 12-NOV-1992.

XX 27-APR-1992; 92WO-US003527.

XX 03-MAY-1991; 91US-00695564.

XX (SCEI ) SCRIPPS RES INST.

XX Tamura RN, Quaranta V;

XX WPI; 1992-398799/48.

XX Integrin alpha sub-unit cytoplasmic domain polypeptide(s) - used for  
 PT prodn. of antibodies and in detection of integrin sub-units in body  
 PT samples.

XX Disclosure; Page 95; 115pp; English.

XX The sequences given in AAQ31193-98 are primers which were used to amplify  
 CC the coding sequences for the human alpha 6A and the hamster alpha 3A  
 CC integrin subunits. Integrins are a family of cell surface receptors which  
 CC serve cellular adhesion functions. These receptors form a link between  
 CC the extracellular matrix and the cytoskeleton through their binding to  
 CC various extracellular components. Each integrin receptor is a heterodimer  
 CC comprised of an alpha and a beta subunit. Each alpha subunit tends to  
 CC associate with only one type of beta subunit but there are several  
 CC exceptions to this rule. The 6A and 6B integrin subunits correspond to  
 CC the laminin receptor. The cytoplasmic domain of the 6A and 6B integrins  
 CC differs from previously isolated alpha 6 integrins. (Updated on 25-MAR-  
 CC 2003 to correct PN field.)

XX Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 881 ACTGTGGGAACATCA 895

Db 3 ACTGTGTGAACATCA 17  
 ||||| ||||| |||||

RESULT 2226

AAV30804

ID AAV30804 standard; DNA; 19 BP.

XX AAV30804;

AC AAV30804;

DT 25-MAR-2003 (revised)

DT 14-SEP-1998 (first entry)

XX Human prohibitin gene 3' UTR primer P3'.

XX Breast cancer; diagnosis; prognosis; assay; prohibitin gene;  
 KW polymorphism; RFLP; human; PCR; primer; ss.

XX Synthetic.

XX Homo sapiens.

XX WO9820167-A1.

XX 14-MAY-1998.

XX 06-NOV-1997; 97WO-US020844.

XX 07-NOV-1996; 96US-0029978P.

XX (OKLA-) OKLAHOMA MEDICAL RES FOUND.

XX Jupe ER, Thompson LF, Resta R, Delloorco RT;

XX WPI; 1998-286976/25.

XX Determining risk of hereditary breast cancer - by determining the base  
 PT identity at position 729 of the 3' untranslated region of the prohibitin  
 PT gene.

XX Disclosure; Page 36; 55pp; English.

XX Sense primer P3' corresponds to nucleotides 768-786 of the 5'-3' sense  
 CC strand of a 1328 bp human prohibitin gene fragment (see AAV30803),  
 CC extending from intron 6 to the 3' untranslated region (3'UTR). It was  
 CC used with primer P4' (see AAV30805) to generate a 442 bp nucleic acid  
 CC fragment that lies immediately 5' to the polymorphic AflIII cut site in  
 CC the 3'UTR. This was used as a probe in Southern blotting experiments. A  
 CC germline polymorphism at position 729 in the prohibitin gene 3'UTR (see  
 CC also AAV30797) is a susceptibility marker for breast cancer. Homozygous  
 CC T/T at this position carries the greatest lifetime risk, heterozygous C/T  
 CC carries intermediate risk, and homozygous C/C the lowest risk. The  
 CC substitution of a T for C at position 729 results in loss of cleavability  
 CC by AflIII. RFLP analysis allows the risk of hereditary breast cancer to  
 CC be determined in both women and men. (Updated on 25-MAR-2003 to correct  
 CC PI field.)

XX Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 566 GCCTCCCTGCTGTC 580

Db 2 GCCTCCCTGCTGTC 16  
 ||||| ||||| |||||

```

RESULT 2227
AA31877
ID AAX31877 standard; DNA; 19 BP.
XX
AC AAX31877;
XX
DT 11-JUN-1999 (first entry)
XX
DE
XX
S. aureus polypeptide encoding DNA amplifying primer.
XX
Staphylococcus aureus polypeptide; thyroiditis; infective carditis;
KW Staphylococcus aureus polypeptide; thyroiditis; infective carditis;
KW lung abscess; secretory diarrhoea; cerebral abscess; conjunctivitis;
KW toxic shock syndrome; folliculitis; septic arthritis; antibacterial;
KW H. pylori infection; gastric ulcer; adenocarcinoma; PCR primer; ss.
XX
OS Synthetic.
OS Staphylococcus aureus.
OS
XX EP905243-A2.
XX
XX 31-MAR-1999.
XX
XX 03-AUG-1998; 98EP-00306185.
XX
XX 05-AUG-1997; 97US-0055387P.
XX
XX (SMIK ) SMITHKLINE BEECHAM CORP.
XX (SMIK ) SMITHKLINE BEECHAM PLC.
XX
XX Lonetto MA, Warren PV, Burnham MKR;
XX
XX WPI; 1999-192667/17.
XX
XX New essential polypeptides from Staphylococcus aureus useful for treating
XX diseases such as infective endocarditis and toxic shock syndrome.
XX
XX Example 2; Page 46; 70pp; English.
XX
XX The invention provides new Staphylococcus aureus polypeptides (AA303781-
XX 94) and the genes (AA31851-864) encoding them. Host cells containing
XX vectors comprising the nucleic acid sequences are used for the
XX recombinant expression of the proteins. The polypeptides can be used to
XX screen for modulators for use in antibacterial therapy. The polypeptides,
XX their antagonists and agonists are used to prevent or treat diseases
XX caused by S. aureus such as thyroiditis, lung abscesses, infective
XX carditis, secretory diarrhoea, cerebral abscesses, conjunctivitis, toxic
XX shock syndrome folliculitis and septic arthritis. Screening for the
XX presence of the polypeptides may be used to diagnose, predict the
XX susceptibility to, or stage the progress of these S. aureus diseases and
XX diseases caused by Helicobacter pylori such as gastric ulcers and gastric
XX adenocarcinoma. There is not much information known about the essential
XX genes expressed by S. aureus during infection but these new polypeptides
XX have been identified as essential. They can therefore be used to develop
XX antibacterial compounds specific for those essential genes and this
XX ensures the effectiveness of the compounds in killing S. aureus. In
XX addition, these polypeptides can be used to effectively diagnose and
XX treat infections and diseases caused by S. aureus without the risk of
XX development of antibiotic resistance. Sequences AAX31863-884 represent
XX PCR primers used for the amplification of the DNAs encoding the S. aureus
XX polypeptides of the invention
XX
XX Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 132 GATGAGAGAGATCAA 146
XX |||||
XX 2 GATGAGAGAGATCCA 16
XX
XX RESULT 2228

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```

AAZ20455
ID AAZ20455 standard; DNA; 19 BP.
XX
AC AAZ20455;
XX
DT 19-NOV-1999 (first entry)
XX
DE
XX PCR primer Bmag5Rev for microsatellite marker clone Bmag5.
XX
XX PCR primer; microsatellite marker; barley; chromosome 7 marker; cereal;
KW fermentability; group 5 chromosome; ethyl carbanate production; Bmac213;
KW wort fermentation; Triticaceae; Bmac96; epi-heterodendrin production;
KW diagnosis; ss.
XX
XX Synthetic.
XX Hordeum vulgare.
XX
XX WO9946404-A1.
XX
XX 16-SEP-1999.
XX
XX 01-MAR-1999; 99WO-GB000602.
XX
XX 10-MAR-1998; 98GB-00005087.
XX
XX (SCCR-) SCOTTISH CROP RES INST.
XX
XX Thomas WTB, Swanson JS, Powell W, Waugh R, Ramsey LD;
XX
XX WPI; 1999-551424/46.
XX
XX Screening cereals for fermentability, especially useful in barley.
XX
XX Claim 20; Page 23; 49pp; English.
XX
XX This sequence represents a PCR primer for a barley chromosome 7
XX microsatellite marker, and can be used in the method of the invention.
XX The method is for screening cereal for fermentability, comprising
XX analysing cereal genomic DNA to determine which allele(s) of a gene/gene
XX complex affecting fermentability at a locus close to the centromere on
XX homologous triticaceae group 5 chromosome (barley chromosome 7) is/are
XX present. The invention also relates to a method for screening cereal for
XX ethyl carbanate production on wort fermentation and distillation,
XX comprising analysing barley genomic DNA to determine which allele(s) of
XX the locus, designated eph on the short arm of homologous triticaceae group
XX 1 chromosome (barley chromosome 5) is/are present. The methods and
XX primers are useful for identifying microsatellites Bmac96 and Bmac213,
XX which are useful for determining fermentability and/or epi-heterodendrin
XX production in cereals, especially barley. Current methods for determining
XX fermentability are difficult to apply within barley breeding programs.
XX Prior art methods using molecular markers have difficulty in detecting
XX levels of allelic variation
XX
XX Sequence 19 BP; 8 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1060 ATCCCAACAAGACA 1074
XX |||||
XX 4 ATCCCAACAAGACA 18
XX
XX RESULT 2229
AAX59837
ID AAX59837 standard; DNA; 19 BP.
XX
AC AAX59837;
XX
XX 28-JUL-1999 (first entry)
XX
XX PCR primer used to amplify a fragment of the prohibitin gene.

```

XX Prohibitin gene; cancer risk; 3' untranslated region; UTR;  
KW germline polymorphism; susceptibility marker; cancer;  
KW genetic counselling; cancer prognosis; PCR primer; ss.  
OS Synthetic.  
OS Homo sapiens.  
XX W09924614-A1.  
PN 20-MAY-1999.  
PD 06-NOV-1998; 98WO-US023686.  
XX 06-NOV-1997; 97US-0064880P.  
XX (OKLA-) OKLAHOMA MEDICAL RES FOUND.  
PA Jupe ER, Thompson LF, Resta R, Dell'orco RT;  
PI WPI; 1999-337719/28.  
XX New diagnostic assay for cancer susceptibility using nucleotide  
PT identification of the prohibitin gene.  
XX Disclosure; Page 36; 43pp; English.  
XX The specification describes a method for determining the identity of  
CC nucleotide 729 of the prohibitin gene as a means of determining the risk  
CC of cancer other than breast cancer. The method comprises determining the  
CC base identity of a portion of genomic DNA from a patient cell, where the  
CC genomic DNA comprises an untranslated region (UTR) of a prohibitin gene,  
CC the portion corresponding to position 729 of the sequence given in  
CC AAX59834, and correlating the base identity with germline polymorphisms  
CC indicative of a risk for the cancer. The prohibitin gene germline  
CC polymorphism in the 3' UTR is used as a susceptibility marker for cancer  
CC other than breast cancer. The method determines the lifetime probability  
CC of an individual developing cancer based on an allelic variation found in  
CC the 3'UTR of the prohibitin gene. This assay could be used in genetic  
CC counselling and cancer prognosis, prediction of disease-free intervals,  
CC long-term survivorship, and determination of therapy for both men and  
CC women. PCR primers AAX59837-38 were used to amplify a fragment of the  
CC prohibitin gene  
XX  
SQ Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 566 GCCTCCGTCGTGTC A 580  
Db 2 GCCTCCGTCGTGTC A 16  
RESULT 2230  
AAA83293  
ID AAA83293 standard; DNA; 19 BP.  
XX  
AC AAA83293;  
XX  
DT 04-DEC-2000 (first entry)  
XX  
DE cdk8 ribozyme binding site #13.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
OS Mammalia.  
XX  
PN W0200032765-A2.  
XX  
PD 08-JUN-2000.  
XX

PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
PT New hairpin and hammerhead ribozyme for inhibiting restenosis. cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
PS Disclosure; Page 59; 109pp; English.  
XX  
CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAX82435 to AAX86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 657 CGTCTACAAAGCCAA 671  
Db 5 CGTCTACAAAGCCAA 19  
RESULT 2231  
ABA81519/c  
ID ABA81519 standard; DNA; 19 BP.  
XX  
AC ABA81519;  
XX  
DT 24-JAN-2002 (first entry)  
XX  
DE Targeted chromosomal genomic alteration expression vector primer #7.  
XX  
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;  
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
KW familial hypercholesterolaemia; UGT1; syndrome; App; PSEN1; antisense;  
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;  
KW antileptic; PCR primer; ss.  
XX  
OS Unidentified.  
XX  
PN W0200173002-A2.  
XX  
PD 04-OCT-2001.  
XX  
PF 27-MAR-2001; 2001WO-US009761.  
XX  
PR 27-MAR-2000; 2000US-0192176P.  
PR 27-MAR-2000; 2000US-0192179P.  
PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
XX  
PA (UYDE ) UNIV DELAWARE.  
XX  
PI Kmiec EB, Gamper HB, Rice MC;

XX DR WPI; 2001-639230/73.

XX PT Oligonucleotide for targeted alterations of genetic sequences and for

XX PT treating cystic fibrosis, comprises at least one mismatch and chemical

XX PT modification.

XX Example 1; Page 17; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can

CC be used for the targeted alteration of genomic sequences, where the

CC oligonucleotide has at least one mismatch compared with the genomic

CC sequence to be altered. In particular, these sequences are directed at

CC the following genes: adenosine deaminase, p53, beta-globin, 2A

CC retinoblastoma, BRCA1, BRCA2, CTR, cyclin-dependent kinase inhibitor 2A

CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus

CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,

CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase

CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and

CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases

CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,

CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,

CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and

CC various syndromes. The present sequence is a PCR primer described in the

CC exemplification of the invention

XX

SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 802 CATGACATTATCCAC 816

Db 16 CAGGACATTATCCAC 2

RESULT 2232

AAH37489/c

ID AAH37489 standard; DNA; 19 BP.

XX

XX AAH37489;

AC

AC

DT 14-AUG-2001 (first entry)

XX

XX SNP specific upper PCR primer SEQ ID 285.

XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;

XX SNRP; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;

XX Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;

XX polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;

XX acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;

XX inflammation; forensic investigation; paternity analysis; PCR primer; ss.

XX Homo sapiens.

XX WO200129262-A2.

XX

XX 26-APR-2001.

XX

XX 13-OCT-2000; 2000WO-US028436.

XX

XX 15-OCT-1999; 99US-0160096P.

XX

XX (ORCH-) ORCHID BIOSCIENCES INC.

XX

XX Picoult-Newburg L, Pohl M;

XX

XX WPI; 2001-290930/30.

XX

XX New genotyping oligonucleotide, useful for detecting the presence,

XX absence or identity of single polynucleotide polymorphism in a nucleic

XX acid sample.

XX Claim 1; Page 51; 83pp; English.

XX

XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide

CC primer extension (SNPE) primers, and the sequences of regions flanking

CC sites of single nucleotide polymorphisms SNPs. The present invention

CC includes kits for determining the presence or absence of a SNP, using the

CC oligonucleotides of the invention. The PCR primers are used to amplify a

CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.

CC The oligonucleotides are useful for genotyping a nucleic acid sample by

CC performing a single-nucleotide primer extension reaction. The

CC oligonucleotides are useful for determining the presence, absence or

CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to

CC assess by association analysis the phenotype of an individual or group of

CC individuals, having a pathological phenotypic trait suspected of being

CC caused by one or more SNPs. Phenotypic traits include diseases e.g.

CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular

CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,

CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic

CC traits also include symptoms of or susceptibility to multifactorial

CC disease of which a component is or may be genetic such as autoimmune

CC diseases, including, rheumatoid arthritis, multiple sclerosis,

CC inflammation, cancer, nervous system diseases and infection by pathogenic

CC microorganism. The method is also useful in forensic investigations and

CC paternity analysis. The present sequence represents a PCR primer specific

CC for a human SNP containing DNA sequence

XX

SQ Sequence 19 BP; 2 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1299 CGAGGAGTTCAGAC 1313

Db 17 CCAGGAGTTCAGAC 3

RESULT 2233

AAH58455

ID AAH58455 standard; DNA; 19 BP.

XX

XX AAH58455;

AC

AC

DT 10-SEP-2001 (first entry)

XX

XX Cell-cycle dependent kinase cdk8 ribozyme binding site SEQ ID NO:879.

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

XX recognition site; target; ribozyme binding site; eye disease; vulvarry;

XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;

XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; WMP;

XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;

XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;

XX antisking; ophthalmological; keratolytic; gene therapy; viral wart;

XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;

XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

XX sickle cell retinopathy; ss.

XX Homo sapiens.

XX Synthetic.

XX

XX WO200130362-A2.

XX

XX 03-MAY-2001.

XX

XX 26-OCT-2000; 2000WO-US029500.

XX

XX 26-OCT-1999; 99US-0161532P.

XX

XX (IMMU-) IMMUSOL INC.

XX

XX Robbins JM, Tritz R;

XX

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XX DR WPI; 2001-300427/31.
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 135; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antiproliferative,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention
XX SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
      Query Match      0.8%; Score 13.4; DB 1; Length 19;
      Best Local Similarity 93.3%; Pred. No. 1.2e+03;
      Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 657 CGTCTACAAAGCAA 671
DB 5 CGTCTACAAAGCAA 19
      |||||
RESULT 2234
ABK24631/c
ID ABK24631 standard; DNA; 19 BP.
XX AC ABK24631;
XX DT 09-APR-2002 (first entry)
XX DE Hygromycin-B coding sequence PCR primer #7.
XX KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
XX KW o-methyl modification; LNA modification; phosphorothioate linkage;
XX KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
XX KW abiotic stress tolerance; improved nutritional value; hygromycin-B;
XX KW amino acid over production; herbicide resistance; glyphosate resistance;
XX KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
XX KW porphyrin herbicide resistance; triazine resistance; disease resistance;
XX KW modified oil production; modified starch production; waxy starch;
XX KW altered floral morphology; male-sterile plant; albino mutant;
XX KW modified fatty acid content; reduced palmitate production; albino plant;
XX KW increased stearate production; reduced linolenic acid production;
XX KW photosynthetic process.
XX OS Mammalia.
XX OS Synthetic.
XX PN WO200192512-A2.
XX PD 06-DEC-2001.
XX DF 01-JUN-2001; 2001WO-US017672.
XX XX 01-JUN-2000; 2000US-0208538P.

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PR 30-OCT-2000; 2000US-0244989P.
PR 27-MAR-2001; 2001US-00818875.
XX PA (UYDE ) UNIV DELAWARE.
XX PI Kmiec EB, Gamper HB, Rice MC, Kim J;
XX DR WPI; 2002-106307/14.
XX XX New oligonucleotides with modified nuclease-resistant termini, useful for
XX PT creating plants with desired phenotypes, e.g. stress tolerance, improved
XX PT nutritional value, herbicide or disease resistance, or modified oil
XX PT production.
XX PS Example 1; Page 20; 220pp; English.
XX CC The invention relates to an oligonucleotide for targeted alteration of a
XX CC genetic sequence, which comprises a single-stranded oligonucleotide
XX CC having a DNA domain. The DNA domain has at least one mismatch with
XX CC respect to the genetic sequence to be altered and further comprises
XX CC chemical modifications of the oligonucleotide. The chemical modifications
XX CC consist of o-methyl modification, an LNA modification, two or more
XX CC phosphorothioate linkages on a terminus, or a combination of any two or
XX CC more of these modifications. The oligonucleotides are useful for
XX CC directing repair or alteration of plant genetic information. The
XX CC oligonucleotides are particularly useful for creating plants with desired
XX CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
XX CC nutritional value (e.g. altering amino acid content of plants or
XX CC conferring amino acid over production), herbicide resistance (e.g.
XX CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
XX CC disease resistance, porphyrin herbicide resistance or triazine resistance),
XX CC resistance to starch or production of waxy starch), altered floral
XX CC morphology (e.g. male-sterile plants) or modified fatty acid content
XX CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
XX CC The oligonucleotides are also useful for producing albino mutants for the
XX CC analysis of photosynthetic processes. This sequence represents a genome
XX CC altering oligonucleotide of the invention
XX SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
      Query Match      0.8%; Score 13.4; DB 1; Length 19;
      Best Local Similarity 93.3%; Pred. No. 1.2e+03;
      Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 802 CATGACATTATCCAC 816
DB 16 CAGGACATTATCCAC 2
      |||||
RESULT 2235
AAL50058/c
ID AAL50058 standard; DNA; 19 BP.
XX AC AAL50058;
XX DT 12-DEC-2002 (first entry)
XX DE Murine alphabeta T-cell receptor related PCR primer #5.
XX KW Mouse; alphabeta T-cell receptor; p53 protein specific T-cell response;
XX KW cytostatic; apoptotic; cancer; leukaemia; immunisation; gene therapy;
XX KW vaccine; PCR; primer; ss.
XX OS Mus musculus.
XX PN DE10109855-A1.
XX PD 12-SEP-2002.
XX PF 01-MAR-2001; 2001DE-01009855.
XX PR 01-MAR-2001; 2001DE-01009855.

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XX (STAN/) STANISLAWSKI T.  
 XX  
 XX Schmitz F, Voss H, Theobalt M;  
 PI  
 XX WPI; 2002-714557/78.  
 DR  
 XX New polypeptide of a murine alpha, beta T-cell receptor, useful for  
 PT treating tumors and leukemia, and induces specific lysis or apoptosis of  
 PT cells expressing p53 protein.  
 XX  
 XX Example 1; Page 17; 30pp; German.  
 PS  
 XX The present invention relates to murine alphabeta T-cell receptors (TCR)  
 CC which mediate a p53 protein-specific T cell response. The proteins and  
 CC their coding sequences are useful for treatment, prevention and diagnosis  
 CC of p53-associated diseases, particularly tumours and leukemia, including  
 CC use for passive or active immunisation, and also to screen for  
 CC therapeutic agents. The present sequence is a PCR primer used to identify  
 CC a protein of the invention  
 XX  
 XX Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 19;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1173 CATCTCTATGAGAT 1187  
 |||||  
 Db 17 CATCTCTATGAGAT 3

RESULT 2236  
 ABS64429/c  
 ID ABS64429 standard; DNA; 19 BP.  
 XX  
 XX AC ABS64429;  
 XX  
 XX DT 15-NOV-2002 (first entry)  
 XX  
 XX Human NOVX forward PCR primer Ag2496.  
 DE  
 XX Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;  
 KW Parkinson's disease; Huntington's disease; neurological disorder;  
 KW schizophrenia; manic depression; mental retardation; angina pectoris;  
 KW cardiovascular disease; acute heart failure; myocardial infarction;  
 KW muscular disease; muscular disorder; retinal disease; photoreception;  
 KW deafness; keratinisation disorder; inflammatory disease; immune disease; diabetes;  
 KW immunological disorder; fungal infection; protozoal infection; obesity;  
 KW bacterial infection; reproductive system disorder; metabolic disturbance;  
 KW anorexia; wasting disorder; chronic disease; infectious disease;  
 KW dyslipidaemia; PCR; primer; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200264791-A2.  
 PN  
 XX 22-AUG-2002.  
 PD  
 XX  
 XX 10-DEC-2001; 2001WO-US048369.  
 PF  
 XX 08-DEC-2000; 2000US-0254329P.  
 PR  
 XX 14-DEC-2000; 2000US-0255648P.  
 PR  
 XX 15-MAY-2001; 2001US-0291037P.  
 PR  
 XX 08-JUN-2001; 2001US-0297173P.  
 PR  
 XX 08-JUN-2001; 2001US-0309258P.  
 PR  
 XX 29-AUG-2001; 2001US-0315639P.  
 PR  
 XX 01-OCT-2001; 2001US-0326393P.  
 PR  
 XX (CURA-) CURAGEN CORP.  
 PA  
 XX Alsobrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;  
 PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;  
 PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, Macdougall JR;  
 PI Millet I, Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shimkets RA;  
 PI Smithson G, Spytek KA, Stone DJ, Tchernev VT, Vernet CAM, Voss BZ;  
 PI Zernhusen BD, Zhong H, Zhong M;  
 XX  
 XX WPI; 2002-643486/69.  
 DR  
 XX New NOVX polypeptides and polynucleotides useful for treating or  
 PT preventing e.g. neurodegenerative diseases, neurological disorders,  
 PT cardiovascular diseases, muscular diseases and disorders, or  
 PT immunological diseases.

CC specific antibody) and a method for identifying hdm2-specific antigens.  
 CC The TCR of the invention has cytostatic and apoptotic activity. The  
 CC products of the invention are useful for treatment, prevention and  
 CC diagnosis of hmd2-associated diseases, particularly tumours and  
 CC leukaemia, including use for passive or active immunisation. They can  
 CC also be used to screen for therapeutic agents. This sequence represents a  
 CC PCR primer used in the construction of the fusion constructs described in  
 CC the disclosure of the invention  
 XX  
 XX Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 19;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1173 CATCTCTATGAGAT 1187  
 |||||  
 Db 17 CATCTCTATGAGAT 3

RESULT 2237  
 ABS64429/c  
 ID ABS64429 standard; DNA; 19 BP.  
 XX  
 XX AC ABS64429;  
 XX  
 XX DT 15-NOV-2002 (first entry)  
 XX  
 XX Human NOVX forward PCR primer Ag2496.  
 DE  
 XX Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;  
 KW Parkinson's disease; Huntington's disease; neurological disorder;  
 KW schizophrenia; manic depression; mental retardation; angina pectoris;  
 KW cardiovascular disease; acute heart failure; myocardial infarction;  
 KW muscular disease; muscular disorder; retinal disease; photoreception;  
 KW deafness; keratinisation disorder; inflammatory disease; immune disease; diabetes;  
 KW immunological disorder; fungal infection; protozoal infection; obesity;  
 KW bacterial infection; reproductive system disorder; metabolic disturbance;  
 KW anorexia; wasting disorder; chronic disease; infectious disease;  
 KW dyslipidaemia; PCR; primer; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200264791-A2.  
 PN  
 XX 22-AUG-2002.  
 PD  
 XX  
 XX 10-DEC-2001; 2001WO-US048369.  
 PF  
 XX 08-DEC-2000; 2000US-0254329P.  
 PR  
 XX 14-DEC-2000; 2000US-0255648P.  
 PR  
 XX 15-MAY-2001; 2001US-0291037P.  
 PR  
 XX 08-JUN-2001; 2001US-0297173P.  
 PR  
 XX 08-JUN-2001; 2001US-0309258P.  
 PR  
 XX 29-AUG-2001; 2001US-0315639P.  
 PR  
 XX 01-OCT-2001; 2001US-0326393P.  
 PR  
 XX (CURA-) CURAGEN CORP.  
 PA  
 XX Alsobrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;  
 PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;  
 PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, Macdougall JR;  
 PI Millet I, Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shimkets RA;  
 PI Smithson G, Spytek KA, Stone DJ, Tchernev VT, Vernet CAM, Voss BZ;  
 PI Zernhusen BD, Zhong H, Zhong M;  
 XX  
 XX WPI; 2002-643486/69.  
 DR  
 XX New NOVX polypeptides and polynucleotides useful for treating or  
 PT preventing e.g. neurodegenerative diseases, neurological disorders,  
 PT cardiovascular diseases, muscular diseases and disorders, or  
 PT immunological diseases.



XX PS Example 2; Page 264; 299pp; English.

XX CC The present invention relates to new NOVX polypeptides. The polypeptides, polynucleotides and antibodies are useful in the manufacture of a

CC CC medicament for treating or preventing neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease, or Huntington's disease),

CC CC neurological disorders (e.g. anxiety, schizophrenia, manic depression or mental retardation), cardiovascular disease (e.g. acute heart failure,

CC CC angina pectoris or myocardial infarction), muscular diseases and disorders, retinal diseases (including those involving photoreception,

CC CC deafness and keratinisation disorders), cancer (e.g. ovarian cancer or melanoma), immunological disorders, inflammatory and immune diseases,

CC CC bacterial, fungal, protozoal and viral infections, and reproductive system disorders. The proteins of the invention may be used to screen

CC CC drugs or compounds that modulate the NOVX protein activity or expression, as well as to treat disorders characterised by insufficient or excessive

CC CC production of NOVX protein or protein forms that have decreased or aberrant activity compared to NOVX wild type protein, such as diabetes,

CC CC obesity, metabolic disturbances associated with obesity, anorexia and wasting disorders associated with chronic diseases and various cancers,

CC CC infectious diseases and various dyslipidaemias. The nucleic acid sequences of the invention may be used in chromosome mapping, identifying

CC CC an individual from minute biological samples (tissue typing), and in forensic identification of a biological sample. The present nucleic acid

CC CC sequence represents a PCR primer that was used in the methods of the invention for amplification of NOVX genes

XX CC

XX SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1391 TCACCAGCTGCTGC 1405  
||||| |||||

Db 15 TCACCAGCTGCTGC 1

RESULT 2238

ADF32509/c

ID ADF32509 standard; DNA; 19 BP.

XX AC ADF32509;

XX AC ADF32509;

DT 12-FEB-2004 (first entry)

XX DE ADH1 reverse transcriptase PCR primer R.

XX KW transgenic plant; enhanced stress tolerance;

KW abscisic acid responsive element-binding transcription factor; ABF;

KW reverse transcriptase; PCR primer; ss.

XX OS Synthetic.

XX KR2002042796-A.

XX 07-JUN-2002.

XX 27-MAY-2002; 2002KR-00029205.

XX 27-MAY-2002; 2002KR-00029205.

XX (KOKU-) KOREA KUMHO PETROCHEMICAL CO LTD.

XX Choi HI, Kim SY;

XX WPI; 2002-747965/81.

XX Transgenic plants with enhanced stress tolerance.

XX Example; Page 11; 18pp; Korean.

CC CC The present invention describes transgenic plants with enhanced stress

CC CC tolerance. The transgenic plant with enhanced stress tolerance is

CC CC composed of recombinant DNA segments encoding abscisic acid responsive

CC CC element-binding transcription factors (ABFs) and expresses an effective

CC CC amount of ABFs sufficient to increase tolerance to stress, where the ABF

CC CC is ABF3 and/or ABF4. The present invention also describes a method for

CC CC increasing tolerance against decreased water utility and other

CC CC environmental stress comprises constructing an expression vector

CC CC containing a nucleotide sequence for controlling over or under expression

CC CC of ABF and an ABF gene in the sense or anti-sense direction, introducing

CC CC the expression vector into a plant cell using Agrobacterium-mediated

CC CC transformation, ballistic transformation or other transformation, and

CC CC selecting and maintaining transformed cell capable of expressing the

CC CC recombinant ABF. The present sequence represents a reverse transcriptase

CC CC (RT) PCR primer which is used in the exemplification of the present

CC CC invention.

XX SQ Sequence 19 BP; 3 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 958 CGCAGAAAGGTGCTA 972  
||||| |||||

Db 15 CTGCAGAAAGGTGCTA 1

RESULT 2239

ADC39346/c

ID ADC39346 standard; DNA; 19 BP.

XX AC ADC39346;

XX AC ADC39346;

DT 18-DEC-2003 (first entry)

XX DE Novel human NOVX gene forward primer SEQ ID NO: 290.

XX KW antidiabetic; cytostatic; immunomodulator; anorectic; antilipemic;

KW neurotropic; neuroprotective; immunostimulant; antiparkinsonian; anti-HIV;

KW antiasthmatic; antiinflammatory; hypotensive; antiarteriosclerotic;

KW hemostatic; osteopathic; gene therapy.; NOVX; diabetes; obesity; cancer;

KW lymphoma; uterus cancer; prostate cancer; dyslipidemia; anorexia;

KW wasting disorder; Alzheimer's disease; Parkinson's disorder; cachexia;

KW cardiomyopathy; AIDS; asthma; Crohn's disease; multiple sclerosis;

KW hypertension; atherosclerosis; hemophilia; graft-versus-host disease;

KW Albright hereditary osteodystrophy; ss; primer.

XX OS Homo sapiens.

XX WO2003010327-A2.

XX 06-FEB-2003.

XX 02-MAY-2002; 2002WO-US014199.

XX 02-MAY-2001; 2001US-0288063P.

XX 03-MAY-2001; 2001US-0288395P.

XX 07-MAY-2001; 2001US-0289087P.

XX 09-MAY-2001; 2001US-0289817P.

XX 09-MAY-2001; 2001US-0289818P.

XX 11-MAY-2001; 2001US-0290194P.

XX 14-MAY-2001; 2001US-0290753P.

XX 15-MAY-2001; 2001US-0291181P.

XX 16-MAY-2001; 2001US-0291243P.

XX 18-MAY-2001; 2001US-0292001P.

XX 21-MAY-2001; 2001US-0292374P.

XX 22-MAY-2001; 2001US-0292587P.

XX 23-MAY-2001; 2001US-0293107P.

XX 25-MAY-2001; 2001US-0293747P.

XX 29-MAY-2001; 2001US-0294109P.

XX 29-MAY-2001; 2001US-0294110P.

XX 30-MAY-2001; 2001US-0294434P.

PR 31-MAY-2001; 2001US-0294827P.  
PR 12-JUL-2001; 2001US-0304879P.  
PR 31-JUL-2001; 2001US-0308901P.  
PR 14-AUG-2001; 2001US-0312270P.  
PR 17-AUG-2001; 2001US-0313416P.  
PR 20-SEP-2001; 2001US-0318463P.  
PR 27-SEP-2001; 2001US-0325683P.  
PR 18-OCT-2001; 2001US-0330292P.  
PR 28-NOV-2001; 2001US-0333873P.  
PR 03-DEC-2001; 2001US-0336909P.  
PR 03-DEC-2001; 2001US-0337552P.  
PR 21-FEB-2002; 2002US-0359245P.  
PR 01-MAY-2002; 2002US-00136826.  
XX (CURA-) CURAGEN CORP.  
XX Miller CE, Kekuda R, Malyankar UM, Li L, Pena CEA, Spytek KA;  
XX Gorman L, Guo X, Fernandes ER, Smithson G, Stone DU, Zerhusen BD;  
XX Patturajan M, Anderson DW, Mezes PS, Peyman JA, Macdougall JR;  
XX Padigaru M, Rastelli L, Shenoy SG, Gerlach VL, Shimkets RA, Zhong M;  
XX Edinger SR, Ellerman K;  
XX WPI; 2003-239445/23.  
XX New NOVX polypeptides and polynucleotides, useful in gene therapy,  
XX particularly for treating or preventing a syndrome associated with a  
XX human disease e.g. diabetes, obesity, cancer, Alzheimer's disease,  
XX hypertension or hemophilia.  
XX Disclosure; SEQ ID NO 290; 748pp; English.  
XX The invention relates to new isolated NOVX polypeptides, the genes  
XX encoding them or sequences having at least 95% identity to the amino acid  
XX or nucleotide sequences. The NOVX polypeptide is useful as a therapeutic,  
XX particularly in the manufacture of a medicament for treating a syndrome  
XX associated with a human disease, which includes a pathology associated  
XX with NOVX polypeptide. The NOVX polypeptide is particularly useful for  
XX treating, preventing or alleviating pathology associated with NOVX  
XX polypeptide in a mammal, e.g. a human. The NOVX nucleic acid and  
XX polypeptide are especially useful for treating or preventing e.g.  
XX diabetes, obesity, cancers (e.g. lymphoma, uterus cancer or prostate  
XX cancer), dyslipidemias, anorexia, wasting disorders, Alzheimer's disease,  
XX Parkinson's disorder, cachexia, cardiomyopathy, AIDS, asthma, Crohn's  
XX disease, multiple sclerosis, hypertension, atherosclerosis, hemophilia,  
XX graft-versus-host disease or Albright hereditary osteodystrophy. The DNA  
XX encoding the protein is useful in gene therapy for treating the above  
XX conditions. These are also useful in developing powerful assay systems for  
XX functional analysis of various human disorders, as well as in diagnostic  
XX applications. This sequence represents a forward PCR primer used to  
XX amplify and isolate one of the NOVX genes of the invention.  
XX  
XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1391 TCACCAAGCTGTTC 1405  
DB 15 TCACCAAGCTGTTC 1  
RESULT 2240  
ADE29716/c  
ID ADE29716 standard; RNA; 19 BP.  
XX ADE29716;  
AC ADE29716;  
XX 29-JAN-2004 (first entry)  
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:338.  
XX Short interfering nucleic acid; siNA; downregulation; inhibition;  
XX

KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
KW psoriasis; inflammatory bowel disease; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.  
XX Synthetic.  
OS WO2003072590-A1.  
XX 04-SEP-2003.  
XX 28-JAN-2003; 2003WO-US002510.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Usman N, Haeberli P, Chowrira B;  
XX WPI; 2003-689980/65.  
XX New short interfering nucleic acid, useful e.g. for treatment and  
XX diagnosis of cancer, downregulates expression of mitogen-activated  
XX protein kinase genes.  
XX Example 3; SEQ ID NO 338; 164pp; English.  
XX The present invention describes a short interfering nucleic acid (siNA)  
XX that downregulates expression of a mitogen-activated protein kinase  
XX (MAPK) genes by RNA interference. Also described: (1) a method for  
XX modulating expression of MAPK genes in cells, tissue explants or  
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo  
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
XX vectors that express siNA and cells containing these vectors. MAPK siNA  
XX have cytostatic, anorectic, antidiabetic, antibacterial, antirheumatic,  
XX antiasthmatic, immunosuppressive and gastrointestinal activities. The MAPK  
XX siNA can be used to modulate the expression of MAPK genes in cells,  
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I  
XX and II; a wide range of tumours, and inflammatory diseases (asthma,  
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
XX disease). They can also be used for drug screening; diagnosis; target  
XX identification and validation; genetic engineering; pharmacogenomics;  
XX studying gene function and gene mapping (e.g. of single-nucleotide  
XX polymorphisms). The present sequence represents a MAPK siNA which is used  
XX in the exemplification of the present invention.  
XX  
XX Sequence 19 BP; 3 A; 5 C; 9 G; 0 T; 2 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 105 CGCGCCCGCCCGCAT 119  
DB 15 CGCGCCCGCCCGCAT 1  
RESULT 2241  
ADE29821  
ID ADE29821 standard; RNA; 19 BP.  
XX ADE29821;  
AC ADE29821;  
XX

```

DT 29-JAN-2004 (first entry)
DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:443.
XX
XX short interfering nucleic acid; siNA; downregulation; inhibition;
XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
XX cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
XX immunosuppressive; antibacterial; antirheumatic; antiarthritic;
XX antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
XX inflammatory disease; asthma; septic shock; rheumatoid arthritis;
XX psoriasis; inflammatory bowel disease; drug screening;
XX genetic engineering; pharmacogenomic; gene mapping; ss.
XX Synthetic.
XX OS WO2003072590-A1.
XX PN
XX
XX PD 04-SEP-2003.
XX
XX PF 28-JAN-2003; 2003WO-US002510.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX
XX PA (STRN-) STERNA THERAPEUTICS INC.
XX
XX PI Mcswiggen J, Beigelman L, Usman N, Haeblerl P, Chowrira B;
XX
XX DR WPI; 2003-689980/65.
XX
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of mitogen-activated
XX protein kinase genes.
XX
XX PS Example 3; SEQ ID NO 443; 164pp; English.
XX
XX CC The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of a mitogen-activated protein kinase
XX (MAPK) genes by RNA interference. Also described: (1) a method for
XX modulating expression of MAPK genes in cells, tissue explants or
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
XX vectors that express siNA and cells containing these vectors. MAPK siNAs
XX have cytostatic, anorectic, antidiabetic, antiinflammatory,
XX antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
XX siNAs can be used to modulate the expression of MAPK genes, in cells,
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I
XX and II; a wide range of tumours, and inflammatory diseases (asthma,
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
XX disease). They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents a MAPK siNA which is used
XX in the exemplification of the present invention.
XX
XX SQ Sequence 19 BP; 2 A; 9 C; 5 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 86.7%; Pred. No. 1.2e+03;
XX Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX Qy 105 CGCGCCGCCCGCGGAT 119
XX ||||| |||||
XX Db 5 CGCGCCCGCGCGGAU 19
XX
XX RESULT 2242

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```

ADF48372/c
ID ADF48372 standard; RNA; 19 BP.
XX
XX AC ADF48372;
XX
XX DT 12-FEB-2004 (first entry)
XX
XX DE Human Myb siNA lower strand, SEQ ID 509.
XX
XX KW Human; Myc; Myb; cancer; proliferative disease; restenosis;
XX polycystic kidney disease; RNA interference;
XX short interfering nucleic acid; siNA; short interfering RNA; siRNA;
XX double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
XX expression modulation; gene therapy; drug screening; diagnosis;
XX therapeutic target identification; pharmacogenomics;
XX gene function analysis; gene mapping; cytostatic; vasotropic;
XX nephrotropic; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003070917-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 20-FEB-2003; 2003WO-US005326.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-OCT-2002; 2002US-0418655P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Mcswiggen J, Beigelman L;
XX
XX DR WPI; 2003-689784/65.
XX
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of Myc or Myb genes.
XX
XX PS Example 7; Page 133; 161pp; English.
XX
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human Myc or Myb genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the Myc or Myb genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancers and other proliferative diseases, such as
XX restenosis and polycystic kidney disease. The siNAs are also useful for
XX drug screening, diagnosis, therapeutic target identification and
XX validation, genetic engineering, pharmacogenomics, studying gene
XX function, and gene mapping (e.g., of single nucleotide polymorphisms).
XX The present sequence represents the lower strand of a human Myb-targeted
XX double-stranded siNA.
XX
XX SQ Sequence 19 BP; 4 A; 2 C; 3 G; 0 T; 10 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;

```

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 134 TGAAGAAGATCAAAAC 148  
||||| |||||  
Db 15 TGAAGAAAATCAAAAC 1

RESULT 2243  
ADF48193  
ID ADF48193 standard; RNA; 19 BP.  
AC ADF48193;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE Human Myb transcript target sequence/siNA upper strand, SEQ ID 330.

XX Human; Myc; Myb; cancer; proliferative disease; restenosis;  
KW Polycystic kidney disease; RNA interference;  
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;  
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;  
KW expression modulation; gene therapy; drug screening; diagnosis;  
KW therapeutic target identification; pharmacogenomics;  
KW gene function analysis; gene mapping; cytostatic; vasotropic;  
KW nephrotropic; ss.

XX Homo sapiens.  
XX  
XX WO2003070917-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 20-FEB-2003; 2003WO-US0005326.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-OCT-2002; 2002US-0418655P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.

XX  
XX Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689784/65.

XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of Myc or Myb genes.  
XX  
XX Example 7; Page 133; 161pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the human Myc or Myb genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNA can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the Myc or Myb genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancers and other proliferative diseases, such as  
CC restenosis and polycystic kidney disease. The siNAs are also useful for  
CC drug screening, diagnosis, therapeutic target identification and  
CC validation, genetic engineering, pharmacogenomics, studying gene

CC function, and gene mapping (e.g., of single nucleotide polymorphisms).  
CC The present sequence represents the upper strand of a human Myb-targeted  
CC double-stranded siNA, which is identical to the Myb transcript target  
CC sequence.

XX SQ Sequence 19 BP; 10 A; 3 C; 2 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 80.0%; Pred. No. 1.2e+03;  
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 134 TGAAGAAGATCAAAAC 148  
:|||||:|||||  
Db 5 UGAAGAAAATCAAAAC 19

RESULT 2244  
ADF71308/c  
ID ADF71308 standard; RNA; 19 BP.

XX ADF71308;

XX 12-FEB-2004 (first entry)

DE Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 93.

XX short interfering nucleic acid; siNA;  
KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;  
KW cancer; ss.

XX Homo sapiens.

XX WO2003070886-A2.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004347.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L, Usman N;

XX WPI; 2003-697606/66.

XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of a protein tyrosine  
PT phosphatase type IVa gene.

XX Example 3; SEQ ID NO 93; 131pp; English.

XX The invention relates to a novel short interfering nucleic acid (siNA)  
CC that downregulates expression of a protein tyrosine phosphatase type IV  
CC (PRL3) gene by RNA interference. The invention further relates to  
CC modulating the expression of PRL3 genes in cells, tissue explants or  
CC organisms by the introduction of an siNA; kits for in vitro or in vivo  
CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors  
CC that express siNA. The novel siNA's of the invention have cytostatic  
CC activity. siNA's are used to modulate expression of PRL3 genes, in cells,  
CC tissue explants or organisms, e.g. for treating cancer but also for drug  
CC screening; diagnosis; target identification and validation; genetic  
CC engineering; pharmacogenomics; studying gene function and gene mapping  
CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence  
CC represents a short interfering nucleic acid for downregulating the  
CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the  
CC invention.

```
XX SQ Sequence 19 BP; 3 A; 8 C; 5 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 120 CGCCATGGATCGGAT 134
DB 15 CGCCATGGCTCGGAT 1

RESULT 2245
ADF71234
ID ADF71234 standard; RNA; 19 BP.
XX AC ADF71234;
XX DT 12-FEB-2004 (first entry)
XX KW Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 19.
XX DE short interfering nucleic acid; siNA;
XX KW Protein tyrosine phosphatase type IV; PRL3; RNA interference; cytosstatic;
XX KW cancer; ss.
XX OS Homo sapiens.
XX XX WO2003070886-A2.
XX PN 28-AUG-2003.
XX PD 11-FEB-2003; 2003WO-US004347.
XX PF 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX XX (RIBO-) RIBOZYME PHARM INC.
XX PA Mcswiggen J, Beigelman L, Usman N;
XX PI WPI; 2003-697606/66.
XX DR New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of a protein tyrosine
XX PT phosphatase type IVa gene.
XX XX Example 3; SEQ ID NO 19; 131pp; English.
XX CC The invention relates to a novel short interfering nucleic acid (siNA)
XX CC that downregulates expression of a protein tyrosine phosphatase type IV
XX CC (PRL3) gene by RNA interference. The invention further relates to
XX CC modulating the expression of PRL3 genes in cells, tissue explants or
XX CC organisms by the introduction of an siNA; kits for in vitro or in vivo
XX CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors
XX CC that express siNA. The novel siNA's of the invention have cytostatic
XX CC activity. siNA's are used to modulate expression of PRL3 genes, in cells,
XX CC tissue explants or organisms, e.g. for treating cancer but also for drug
XX CC screening; diagnosis; target identification and validation; genetic
XX CC engineering; pharmacogenomics; studying gene function and gene mapping
XX CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence
XX CC represents a short interfering nucleic acid for downregulating the
XX CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
XX SQ Sequence 19 BP; 3 A; 5 C; 8 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 120 CGCCATGGATCGGAT 134
DB 5 CGCCAUGGCGUCGAU 19

RESULT 2246
ADF86352
ID ADF86352 standard; DNA; 19 BP.
XX AC ADF86352;
XX DT 26-FEB-2004 (first entry)
XX XX Human integrin alpha-6-beta-4 RT-PCR primer SeqID1.
XX KW integrin alpha-6-beta-4 production; plant extract; Hedera helix;
XX KW English ivy; Echinacea; pumpkin; Taraxacum officinale; dandelion;
XX KW angelica; cosmetic; skin lotion; cream; ointment; foundation; hand cream;
XX KW hair cosmetic; skin ageing; laminin adhesion;
XX KW outer skin basement membrane; outer skin basal cell; skin wrinkle;
XX KW skin dullness; skin sag; youthful skin; PCR; primer; ss; human; RT-PCR;
XX KW reverse transcription PCR.
XX OS Homo sapiens.
XX XX JP2003171225-A.
XX PN 17-JUN-2003.
XX PD 30-NOV-2001; 2001JP-00366056.
XX PF 30-NOV-2001; 2001JP-00366056.
XX PR (FANK-) FANKERU KK.
XX PA WPI; 2003-819090/77.
XX DR Composition for promoting integrin alpha-6-beta-4 used in cosmetics,
XX PT contains extracts of plant selected from Hedera helix, Echinacea,
XX PT pumpkin, Taraxacum officinale or angelica.
XX PS Example; SEQ ID NO 1; 9pp; Japanese.
XX XX This invention relates to a novel composition for human integrin alpha-6-
XX CC beta-4 production promotion which contains extracts of a plant selected
XX CC from Hedera helix (English ivy), Echinacea, pumpkin, Taraxacum officinale
XX CC (dandelion) or angelica. The invention is useful as cosmetics such as
XX CC skin lotion, cream, ointment, foundation, hand cream and hair cosmetics
XX CC for preventing ageing of skin. The composition promotes adhesion of
XX CC laminin, which is a structural component of the outer skin basement
XX CC membrane, and outer skin basal cells. The compositions improve the
XX CC wrinkle, dullness and sag of skin as well as maintaining youthful skin.
XX SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 881 ACTGTGGGACATCA 895
DB 3 ACTGTGTAACATCA 17

RESULT 2247
ADF84774/C
ID ADF84774 standard; RNA; 19 BP.
XX AC ADF84774;
XX XX
```

```
DT 26-FEB-2004 (first entry)
XX
DE Human ABL1-targeted siRNA - SEQ ID 1068.
XX
KW short interfering nucleic acid; siRNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
OS Homo sapiens.
XX
PN WO2003070972-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005234.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-043922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
DR New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
PS Example 7; SEQ ID NO 1068; 197pp; English.
XX
CC The invention relates to a novel double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human ABL1-targeted siRNA of the invention.
XX
SQ Sequence 19 BP; 6 A; 5 C; 7 G; 0 T; 1 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 CTGCTCCGTGGCCTG 945
DB 16 CTGCTCCGTGGACTG 2

RESULT 2248
ADF84455
ID ADF84455 standard; RNA; 19 BP.
XX
AC ADF84455;
XX
DT 26-FEB-2004 (first entry)
DE Human ABL1-targeted siRNA - SEQ ID 749.
XX
KW short interfering nucleic acid; siRNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
```

```
OS Homo sapiens.
XX
PN WO2003070972-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005234.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-043922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
DR New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
PS Example 7; SEQ ID NO 749; 197pp; English.
XX
CC The invention relates to a novel double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human ABL1-targeted siRNA of the invention.
XX
SQ Sequence 19 BP; 1 A; 7 C; 5 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 66.7%; Pred. No. 1.2e+03;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 931 CTGCTCCGTGGCCTG 945
DB 4 CUGCUCGUGGACUG 18

RESULT 2249
ADF77926
ID ADF77926 standard; DNA; 19 BP.
XX
AC ADF77926;
XX
DT 26-FEB-2004 (first entry)
DE Integrin alpha-6 RT-PCR primer SEQ ID NO:1.
XX
KW Skin ageing; prevention; improvement; laminin-5; integrin alpha-6;
KW integrin beta-4; plant extract; rice bran oil; phenyl propanoides;
KW skin basal membrane activation; epidermal basal cell activation;
KW light-induced damage suppression; wrinkle prevention;
KW staining prevention; skin dullness prevention; skin maintenance; cosmetic;
KW human; keratinocyte; expression analysis; reverse transcription-PCR;
KW RT-PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN JP2003226655-A.
XX
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PD 12-AUG-2003.
XX
XX 31-JAN-2002; 2002JP-00022671.
XX
XX 31-JAN-2002; 2002JP-00022671.
XX
XX (FANK-) FANKRU KK.
XX
XX WPI; 2003-837162/78.
XX
XX Composition for preventing and improving ageing of skin, comprises
XX component that promotes laminin and integrin production.
XX
XX Example; SEQ ID NO 1; 17pp; Japanese.
XX
XX The invention relates to a composition for the prevention and improvement
XX of skin ageing. The composition comprises a component which promotes the
XX production of laminin-5 and the integrins alpha-6 and beta-4. The active
XX component used in the composition is preferably an extract from the
XX plants Euphoria longan, Strobilanthes cusia, Polygonatum falcatum,
XX Polygonatum sibiricum, ivy (Hedera helix), Echinacea, pumpkin (Cucurbita
XX pepo), dandelion (Taraxacum officinale), and/or angelica (Angelica
XX archangelica); rice bran oil; or phenyl propanoides or its salt. The
XX composition prevents the ageing of skin by activating skin basal membrane
XX and/or epidermal basal cells, and by suppressing light-induced damage.
XX The composition also prevents wrinkle formation, staining and skin
XX dullness, and helps to maintain the skin in a healthy condition.
XX Sequences ADF77926-ADF77931 represent reverse transcription-PCR (RT-PCR)
XX primers used in an example of the invention to determine the effect of
XX various plant extracts on integrin alpha-6 and integrin beta-4 gene
XX expression in human keratinocytes, using glyceraldehyde-3-phosphate
XX dehydrogenase (G3PDH) gene expression as a control.
XX
XX Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 881 ACTGTGGGAACATCA 895
XX ||||| |||||
XX Db 3 ACTGTGTGAACATCA 17
XX
XX RESULT 2250
XX ADL79883/C
XX ID ADL79883 standard; RNA; 19 BP.
XX
XX AC ADL79883;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human HER1 (EGFR) siNA lower strand, SEQ ID NO:1048.
XX
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; cancer;
XX cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
XX HER1; c-erb-B-1; ss.
XX
XX Homo sapiens.
XX
XX WO2003070912-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005045.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 29-MAY-2002; 2002WO-US016840.
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PR 06-JUN-2002; 2002US-00163552.
PR
PR 06-JUN-2002; 2002US-0386782P.
PR
PR 03-JUL-2002; 2002US-0393924P.
PR
PR 29-AUG-2002; 2002US-0406784P.
PR
PR 05-SEP-2002; 2002US-0408378P.
PR
PR 09-SEP-2002; 2002US-0409293P.
PR
PR 19-SEP-2002; 2002US-00251117.
PR
PR 21-OCT-2002; 2002US-00277494.
PR
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
XX
XX WPI; 2003-697612/66.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of the epidermal growth
XX factor receptor gene.
XX
XX Example 3; SEQ ID NO 1048; 171pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of one or more human epidermal growth factor
XX receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of EGFR genes in cells, tissue explants or
XX organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX for the treatment of a variety of conditions. They may be used for
XX treating a wide range of cancers such as breast and ovarian cancer. The
XX siNAs are also useful for drug screening, diagnosis, therapeutic target
XX identification and validation, genetic engineering, pharmacogenomics,
XX studying gene function, and gene mapping (e.g., of single nucleotide
XX polymorphisms). The present sequence represents the lower strand of a
XX human HER1 (EGFR)-targeted double-stranded siNA.
XX
XX Sequence 19 BP; 2 A; 7 C; 7 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1627 GGCCCCAGCAGCGAG 1641
XX ||||| |||||
XX Db 18 GGCCCCAGCAGCGCG 4
XX
XX RESULT 2251
XX ADL79218/C
XX ID ADL79218 standard; RNA; 19 BP.
XX
XX AC ADL79218;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:383.
XX
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; cancer;
XX cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
XX HER2; EGFR2; neu; erbB2; c-erb-B-2; ss.
```



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XX OS Homo sapiens.
XX PN WO2003070912-A2.
XX XX
XX PD 28-AUG-2003.
XX XX
XX PF 20-FEB-2003; 2003WO-US005045.
XX XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 29-MAY-2002; 2002WO-US016840.
XX PR 06-JUN-2002; 2002US-00163552.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 03-JUL-2002; 2002US-0393924P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 19-SEP-2002; 2002US-00251117.
XX PR 21-OCT-2002; 2002US-00277494.
XX PR 15-JAN-2003; 2003US-0440129P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
XX XX
XX XX WPI; 2003-697612/66.
XX XX
XX DR New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of the epidermal growth
XX PT factor receptor gene.
XX XX
XX PS Example 3; SEQ ID NO 383; 171pp; English.
XX XX
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of one or more human epidermal growth factor
XX CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
XX CC interference. The siNAs may or may not comprise ribonucleotides and may
XX CC be double or single stranded. They further comprise sense and antisense
XX CC regions, or alternatively are assembled from a sense oligonucleotide and
XX CC an antisense oligonucleotide. Specifically, the siNAs include short
XX CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX CC can contain deoxyribonucleotides, and can be chemically synthesised,
XX CC expressed from a vector or enzymatically synthesised. The invention also
XX CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX CC used to modulate expression of EGFR genes in cells, tissue explants or
XX CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX CC for the treatment of a variety of conditions. They may be used for
XX CC treating a wide range of cancers such as breast and ovarian cancer. The
XX CC siNAs are also useful for drug screening, diagnosis, therapeutic target
XX CC identification and validation, genetic engineering, pharmacogenomics,
XX CC studying gene function, and gene mapping (e.g., of single nucleotide
XX CC polymorphisms). The present sequence represents the lower strand of a
XX CC HER2 (EGFR2)-targeted double-stranded siNA.
XX XX
XX SQ Sequence 19 BP; 4 A; 8 C; 2 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 356 CTGATGGGAGAGTG 370
XX |||||||||
XX Db 18 CTGATGGGAGAGTG 4
XX
XX RESULT 2252
XX ADL79576
XX ID ADL79576 standard; RNA; 19 BP.
XX XX
XX AC ADL79576;
```

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XX XX
XX DT 20-MAY-2004 (first entry)
XX DE Human HER1 (EGFR) transcript target sequence/siNA upper strand, SEQ:741.
XX XX
XX KW RNA interference; short interfering nucleic acid; siNA;
XX KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX KW short hairpin RNA; shRNA; expression modulation; Gene therapy;
XX KW drug screening; diagnosis; therapeutic target identification;
XX KW pharmacogenomics; gene function analysis; gene mapping; cancer;
XX KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
XX KW HER1; C-erb-B-1; target sequence; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO2003070912-A2.
XX XX
XX PD 28-AUG-2003.
XX XX
XX PF 20-FEB-2003; 2003WO-US005045.
XX XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 29-MAY-2002; 2002WO-US016840.
XX PR 06-JUN-2002; 2002US-00163552.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 03-JUL-2002; 2002US-0393924P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 19-SEP-2002; 2002US-00251117.
XX PR 21-OCT-2002; 2002US-00277494.
XX PR 15-JAN-2003; 2003US-0440129P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
XX XX
XX XX WPI; 2003-697612/66.
XX XX
XX DR New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of the epidermal growth
XX PT factor receptor gene.
XX XX
XX PS Example 3; SEQ ID NO 741; 171pp; English.
XX XX
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of one or more human epidermal growth factor
XX CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
XX CC interference. The siNAs may or may not comprise ribonucleotides and may
XX CC be double or single stranded. They further comprise sense and antisense
XX CC regions, or alternatively are assembled from a sense oligonucleotide and
XX CC an antisense oligonucleotide. Specifically, the siNAs include short
XX CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX CC can contain deoxyribonucleotides, and can be chemically synthesised,
XX CC expressed from a vector or enzymatically synthesised. The invention also
XX CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX CC used to modulate expression of EGFR genes in cells, tissue explants or
XX CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX CC for the treatment of a variety of conditions. They may be used for
XX CC treating a wide range of cancers such as breast and ovarian cancer. The
XX CC siNAs are also useful for drug screening, diagnosis, therapeutic target
XX CC identification and validation, genetic engineering, pharmacogenomics,
XX CC studying gene function, and gene mapping (e.g., of single nucleotide
XX CC polymorphisms). The present sequence represents the upper strand of a
XX CC human HER1 (EGFR) -targeted double-stranded siNA, which is identical to
XX CC the HER1 transcript target sequence.
XX XX
XX SQ Sequence 19 BP; 3 A; 7 C; 7 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
```



Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1627 GGCCCCCAGCAGCAG 1641  
| | | | | | | | | | | | | | | |  
Db 2 GGCCCCCAGCAGCGC 16

RESULT 2253  
ADL78969  
ID ADL78969 standard; RNA; 19 BP.  
XX AC ADL78969;  
XX AC  
XX 20-MAY-2004 (first entry)  
XX  
XX Human HER2 (EGFR2) transcript target sequence/siNA upper strand, SEQ:134.  
XX RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; cancer;  
KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;  
KW HER2; EGFR2; neu; erbB2; c-erbB-2; target sequence; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003070912-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005045.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 29-MAY-2002; 2002WO-US016840.  
PR 06-JUN-2002; 2002US-00163552.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 03-JUL-2002; 2002US-0393924P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 19-SEP-2002; 2002US-00251117.  
PR 21-OCT-2002; 2002US-00277434.  
PR 15-JAN-2003; 2003US-0440123P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;  
XX WPI; 2003-697612/66.  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of the epidermal growth  
PT factor receptor gene.  
XX  
XX Example 3; SEQ ID NO 134; 171pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of one or more human epidermal growth factor  
CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of EGFR genes in cells, tissue explants or

CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants  
CC for the treatment of a variety of conditions. They may be used for  
CC treating a wide range of cancers such as breast and ovarian cancer. The  
CC siNAs are also useful for drug screening, diagnosis, therapeutic target  
CC identification and validation, genetic engineering, pharmacogenomics,  
CC studying gene function, and gene mapping (e.g., of single nucleotide  
CC polymorphisms). The present sequence represents the upper strand of a  
CC human HER2 (EGFR2)-targeted double-stranded siNA, which is identical to  
CC the HER2 transcript target sequence.

XX  
SQ Sequence 19 BP; 5 A; 2 C; 8 G; 0 T; 4 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 73.3%; Pred. No. 1.2e+03;  
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGCGAGAGTG 370  
| | | | | | | | | | | | | | | |  
Db 2 CUGAUGGGGAGAAUG 16

RESULT 2254  
ADN34266/c  
ID ADN34266 standard; RNA; 19 BP.  
XX AC ADN34266;  
XX  
XX 01-JUL-2004 (first entry)  
XX  
XX Lower strand of cyclin D1 targeted double stranded siNA #47.  
XX  
KW short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;  
KW cancer; cell-proliferation disorder; restenosis; drug screening;  
KW genetic engineering; pharmacogenomics; gene mapping;  
KW single nucleotide polymorphisms; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003072705-A2.  
XX  
XX 04-SEP-2003.  
XX  
XX 06-FEB-2003; 2003WO-US003662.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 17-SEP-2002; 2002US-0411275P.  
PR 15-JAN-2003; 2003US-0440123P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Thompson J, Mcswiggen J, Beigelman L;  
XX WPI; 2003-689983/65.  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer and restenosis, down regulates expression of at least  
PT one cyclin gene.  
XX  
XX Example 3; SEQ ID NO 286; 144pp; English.

XX The present invention relates to a short interfering nucleic acid (siNA)  
CC that down regulates expression of at least one cyclin gene by RNA  
CC interference. siNA are used to modulate expression of cyclin genes, in  
CC cells, tissue explants or organisms, e.g. for treating a wide range of  
CC cancers and other cell-proliferation disorders such as restenosis, but  
CC also for drug screening, diagnosis, target identification and validation;  
CC genetic engineering, pharmacogenomics, studying gene function and gene  
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence

```
CC represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
SQ Sequence 19 BP; 3 A; 9 C; 4 G; 0 T; 3 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 93.3%; Pred. No. 1.2e+03;
    Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 236 GTGGTGGCGGCGAGTG 250
Db 19 GTGGTGGCGGCGAGTG 5

RESULT 2255
ADN34027
ID ADN34027 standard; RNA; 19 BP.
XX
AC ADN34027;
XX
DT 01-JUL-2004 (first entry)
XX
DE Upper strand of cyclin D1 targeted double stranded siNA #47.
XX
KW short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
KW cancer; cell-proliferation disorder; restenosis; drug screening;
KW genetic engineering; pharmacogenomics; gene mapping;
KW single nucleotide polymorphisms; ss.
XX
OS Homo sapiens.
XX
PN WO2003072705-A2.
XX
PD 04-SEP-2003.
XX
PF 06-FEB-2003; 2003WO-US003662.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson J, Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689983/65.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer and restenosis, down regulates expression of at least
PT one cyclin gene.
XX
PS Example 3; SEQ ID NO 47; 144pp; English.
XX
CC The present invention relates to a short interfering nucleic acid (siNA)
CC that down regulates expression of at least one cyclin gene by RNA
CC interference. siNA are used to modulate expression of cyclin genes, in
CC cells, tissue explants or organisms, e.g. for treating a wide range of
CC cancers and other cell-proliferation disorders such as restenosis, but
CC also for drug screening, diagnosis, target identification and validation;
CC genetic engineering, pharmacogenomics, studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents the upper strand of cyclin D1 targeted double stranded siNA
CC which is identical to the cyclin D1 transcript target sequence.
XX
SQ Sequence 19 BP; 3 A; 4 C; 9 G; 0 T; 3 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 73.3%; Pred. No. 1.2e+03;
    Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

CC represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
SQ Sequence 19 BP; 3 A; 9 C; 4 G; 0 T; 3 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 93.3%; Pred. No. 1.2e+03;
    Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 236 GTGGTGGCGGCGAGTG 250
Db 1 GUGGUGGCCGACAGUG 15

RESULT 2256
ADN34255/c
ID ADN34255 standard; RNA; 19 BP.
XX
AC ADN34255;
XX
DT 01-JUL-2004 (first entry)
XX
DE Lower strand of cyclin D1 targeted double stranded siNA #36.
XX
KW short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
KW cancer; cell-proliferation disorder; restenosis; drug screening;
KW genetic engineering; pharmacogenomics; gene mapping;
KW single nucleotide polymorphisms; ss.
XX
OS Homo sapiens.
XX
PN WO2003072705-A2.
XX
PD 04-SEP-2003.
XX
PF 06-FEB-2003; 2003WO-US003662.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson J, Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689983/65.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer and restenosis, down regulates expression of at least
PT one cyclin gene.
XX
PS Example 3; SEQ ID NO 275; 144pp; English.
XX
CC The present invention relates to a short interfering nucleic acid (siNA)
CC that down regulates expression of at least one cyclin gene by RNA
CC interference. siNA are used to modulate expression of cyclin genes, in
CC cells, tissue explants or organisms, e.g. for treating a wide range of
CC cancers and other cell-proliferation disorders such as restenosis, but
CC also for drug screening, diagnosis, target identification and validation;
CC genetic engineering, pharmacogenomics, studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
SQ Sequence 19 BP; 4 A; 5 C; 6 G; 0 T; 4 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 93.3%; Pred. No. 1.2e+03;
    Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 275 CTGCTCTCTGGGGAAC 289
Db 19 CTGCTCTCTGGTGAAC 5

RESULT 2257
ADN34016
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ID  ADN34016 standard; RNA; 19 BP.
XX  AC  ADN34016;
XX  DT  01-JUL-2004 (first entry)
XX  DE  Upper strand of cyclin D1 targeted double stranded siNA #36.
XX  KW  short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
KW  cancer; cell-proliferation disorder; restenosis; drug screening;
KW  genetic engineering; pharmacogenomics; Gene mapping;
KW  single nucleotide polymorphisms; ss.
XX  OS  Homo sapiens.
XX  PN  WO2003072705-A2.
XX  PD  04-SEP-2003.
XX  PF  06-FEB-2003; 2003WO-US003662.
XX  PR  20-FEB-2002; 2002US-0358580P.
XX  PR  11-MAR-2002; 2002US-0363124P.
XX  PR  06-JUN-2002; 2002US-0386782P.
XX  PR  29-AUG-2002; 2002US-0406784P.
XX  PR  05-SEP-2002; 2002US-0408378P.
XX  PR  09-SEP-2002; 2002US-0409293P.
XX  PR  17-SEP-2002; 2002US-0411273P.
XX  PR  15-JAN-2003; 2003US-0440129P.
XX  PA  (RIBO-) RIBOZYME PHARM INC.
PI  Thompson J, Mcswiggen J, Beigelman L;
XX  WPI; 2003-689983/65.
XX  New short interfering nucleic acid, useful e.g. for treatment and
PT  diagnosis of cancer and restenosis, down regulates expression of at least
PT  one cyclin gene.
XX  Example 3; SEQ ID NO 36; 144pp; English.
XX  The present invention relates to a short interfering nucleic acid (siNA)
CC  that down regulates expression of at least one cyclin gene by RNA
CC  interference. siNA are used to modulate expression of cyclin genes, in
CC  cells, tissue explants or organisms, e.g. for treating a wide range of
CC  cancers and other cell-proliferation disorders such as restenosis, but
CC  also for drug screening, diagnosis, target identification and validation;
CC  genetic engineering, pharmacogenomics, studying gene function and gene
CC  mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC  represents the upper strand of cyclin D1 targeted double stranded siNA
CC  which is identical to the cyclin D1 transcript target sequence.
XX  SQ  Sequence 19 BP; 4 A; 6 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY  275 CTGCTCCTGGGGAAC 289
DB  1 CUGCUCCUGGUGAAC 15

RESULT 2258
ADM69520
ID  ADM69520 standard; DNA; 19 BP.
XX  AC  ADM69520;
XX  DT  03-JUN-2004 (first entry)
XX  DE  Plant gene polymorphism marker related primer, SEQ ID 399.

```

```

XX  Primer; variation mapping; mutation mapping; plant;
KW  gene polymorphism marker; ss.
XX  OS  Synthetic.
XX  PN  JP2003289885-A.
XX  PD  14-OCT-2003.
XX  PF  31-JAN-2003; 2003JP-00024620.
XX  PR  01-FEB-2002; 2002JP-00025338.
XX  PA  (RIKA ) RIKAGAKU KENKYUSHO.
PA  (SAIM-) SAI MEDIA KK.
PA  (MATS/) MATSUI M.
PA  (NAKA/) NAKAZAWA M.
XX  WPI; 2004-126231/13.
XX  A primer set and method useful for mapping at least the
PT  variation/mutation part of a plant gene using a gene polymorphism marker.
XX  Claim 7; SEQ ID NO 399; 120pp; Japanese.
XX  The present invention relates to a primer set and method for mapping at
CC  least the variation/mutation part of a plant gene using a gene
CC  polymorphism marker. A mutation site of the plant gene is mapped by
CC  utilizing a genetic polymorphism marker as follows: (a) genomic DNA is
CC  prepared from a plant homozygously having a mutation to be an object of
CC  the mapping; (b) A forward primer 1 containing a base corresponding to
CC  the gene polymorphic marker of one ecotype plant, a forward primer 2
CC  containing a base corresponding to the genetic polymorphism of the other
CC  ecotype plant and a reverse primer 3 based on the base sequence common
CC  with both the ecotype plants are prepared; (c) two kinds of
CC  oligonucleotides emitting fluorescence of different colors when the
CC  genetic polymorphism marker is detected are prepared; (d) an
CC  amplification reaction of the genomic DNA is carried out in the presence
CC  of the primers 1, 2 and 3 and the two kinds of the oligonucleotides; (e)
CC  the fluorescence intensity emitted from the resultant reactional product
CC  is detected and (f) the position on the genome of the mutation site is
CC  determined from the results of detection. The present sequence is a
CC  primer, used to illustrate the invention.
XX  SQ  Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  1239 CTTCAATCTCCGTAT 1253
DB  5 CTTCAATCTCCGTAT 19

RESULT 2259
ADN75530
ID  ADN75530 standard; RNA; 19 BP.
XX  AC  ADN75530;
XX  DT  01-JUL-2004 (first entry)
XX  DE  Human CDC25B CR region siRNA oligonucleotide SEQ ID 355.
XX  KW  small interfering RNA; siRNA; protein-tyrosine-phosphatase; PTP;
KW  cytosstatic; immunomodulator; antimicrobial; antiinflammatory;
KW  antidiabetic; anorectic; cancer; autoimmune disease; infection;
KW  inflammation; diabetes; obesity; RNA interference; gene silencing; ss.
XX  OS  Homo sapiens.

```

PN WO2004016735-A2.  
XX  
PD 26-FEB-2004.  
XX  
XX 23-MAY-2003; 2003WO-US016632.  
XX  
PR 23-MAY-2002; 2002US-0383249P.  
XX  
PR 14-APR-2003; 2003US-0462942P.  
XX  
XX (CEPT-) CEPTYR INC.  
PA (COLD-) COLD SPRING HARBOR LAB.  
XX  
XX Klinghoffer R, Lewis SP, Tonks NK, Meng T;  
XX  
XX WPI; 2004-203773/19.  
XX  
XX New isolated small interfering RNA (siRNA) polynucleotide useful for  
PT treating diseases with aberrant activity of the protein tyrosine  
PT phosphatase, such as cancer, autoimmune disease, infection, inflammation,  
PT diabetes and obesity.  
XX  
XX Example 2; SEQ ID NO 355; 392pp; English.  
XX  
XX This invention describes novel small interfering RNA (siRNA)  
CC polynucleotides capable of interfering with expression of a polypeptide  
CC having protein-tyrosine-phosphatase (PTP) activity. The products of the  
CC invention have cytostatic, immunomodulator, antimicrobial,  
CC antiinflammatory, antidiabetic and anorectic activity. The methods and  
CC compositions of the present invention are useful for treating diseases or  
CC conditions associated with aberrant expression or activity of the protein  
CC tyrosine phosphatase, such as cancer, autoimmune diseases, infection,  
CC inflammation, diabetes and obesity. This sequence represents a siRNA  
CC directed against dual specificity phosphatase (DSP) expression.  
XX  
XX Sequence 19 BP; 8 A; 6 C; 3 G; 0 T; 2 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 86.7%; Pred. No. 1.2e+03;  
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
QY 973 CACCGAGACCTCAAG 987  
Db 3 CACCGAGACCTCAAG 17  
RESULT 2260  
ADN36944  
ID ADN36944 standard; DNA; 19 BP.  
XX  
AC ADN36944;  
XX  
DT 15-JUL-2004 (first entry)  
XX  
DE Primer used to sequence Tn5 insertional site in X. albolineans XALB1.  
XX  
XX Albicidin family; antibiotic production; biosynthetic gene cluster;  
KW XALB1; albicidin biosynthetic gene cluster 1; phytotoxic damage; Tn5;  
KW sequencing; primer; ss.  
XX  
XX Unidentified.  
OS  
XX WO2004035760-A2.  
PN  
XX  
PD 29-APR-2004.  
XX  
XX 17-OCT-2003; 2003WO-US033142.  
PF  
XX 18-OCT-2002; 2002US-0419463P.  
PR  
XX (UYFL ) UNIV FLORIDA.  
PA (CIRA-) CIRAD CENT COOP INT EN RECH AGRONOMIQUE.  
XX  
PI Royer M, Gabriel DW, Frutos R, Rott P;

XX WPI; 2004-365158/34.  
DR  
XX New transformed host cell, useful for producing antibiotics, preferably  
PT polyketide antibiotics for protecting plants against phytotoxic damage,  
PT or damage against albicidin.  
XX  
XX Example 6; SEQ ID NO 52; 193pp; English.  
PS  
XX The present invention relates to a novel Albicidin family of antibiotics  
CC produced by the expression of biosynthetic gene clusters from xanthomonas  
CC albilineans designated as XALB1, XALB2 and XALB3 (albicidin biosynthetic  
CC gene clusters 1, 2 and 3). The invention discloses the polynucleotide  
CC sequences of these gene clusters, and the proteins encoded by the open  
CC reading frames (ORFs) within the gene clusters. Also disclosed are  
CC methods for producing an antibiotic and protecting a plant against damage  
CC from albicidin and against phytotoxic damage. The present sequence  
CC represents a sequencing primer used in the examples of the present  
CC invention.  
XX  
XX Sequence 19 BP; 3 A; 7 C; 6 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1187 TGGCCACAGGCCGTC 1201  
Db 1 TGGCCACAGGCCGTC 15  
RESULT 2261  
ADO56525/C  
ID ADO56525 standard; DNA; 19 BP.  
XX  
AC ADO56525;  
XX  
XX 12-AUG-2004 (first entry)  
DT  
XX Human cyclin-dependent kinase 10, CDK10 proximal SNP probe #50.  
DE  
XX gene therapy; human; ss; melanoma;  
KW melanoma associated polymorphic variation; SNP;  
KW single nucleotide polymorphism; cyclin-dependent kinase 10; CDK10; probe.  
XX  
XX Homo sapiens.  
OS  
XX WO2004044164-A2.  
PN  
XX  
PD 27-MAY-2004.  
XX  
XX 06-NOV-2003; 2003WO-US035879.  
PF  
XX  
XX 06-NOV-2002; 2002US-0424475P.  
PR  
XX 23-JUL-2003; 2003US-0489703P.  
PR  
XX (SEQU-) SEQUENOM INC.  
PA  
XX  
XX Roth RB, Nelson MR, Braun A, Kammerer SM;  
PI  
XX WPI; 2004-411721/38.  
DR  
XX Identifying a subject at risk of melanoma, useful for treating melanoma,  
PT comprises detecting the presence or absence of one or more polymorphic  
PT variations associated with melanoma in a nucleic acid sample from a  
PT subject.  
XX  
XX Example 5; Page 84; 295pp; English.  
PS  
XX The invention relates to a method of identifying a subject at risk of  
CC melanoma comprising detecting the presence or absence of one or more  
CC polymorphic variations associated with melanoma in a nucleic acid sample  
CC from a subject. Preventing melanoma in a subject comprises detecting the



```
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 8 A; 3 C; 6 G; 0 T; 2 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 80.0%; Pred. No. 1.2e+03;
    Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
    |||:||||:||||
    3 GAAGAUGCCCAUGAAA 17

Db

RESULT 2264
ADQ60472
ID ADQ60472 standard; RNA; 19 BP.
XX
AC ADQ60472;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-DBI siRNA DB 51 SEQ ID NO:171.
XX
ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; DBI.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
XX
PT 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 171; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGAAGAUGAUGAAGUAC; GAAGAUCUCUCAGUUU;
CC GUACGACACCCGGAGUA; AGAUAUGAUGAAGUACAU; GAAGAUCUCUCAGUUU;
CC CAUGGCCUCUCUUUGA; UCGGCCUCUCUUUGAUU; GAGAUAUGAUGAAGUAC;
CC GGAGAUAUGAUGAAGUAC; and GAAGACUCUCUCAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
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```
SQ Sequence 19 BP; 7 A; 3 C; 6 G; 0 T; 3 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 80.0%; Pred. No. 1.2e+03;
    Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
    |||:||||:||||
    2 GAAGAUGCCCAUGAAA 16

Db

RESULT 2265
ADQ60470
ID ADQ60470 standard; RNA; 19 BP.
XX
AC ADQ60470;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-DBI siRNA DB 49 SEQ ID NO:169.
XX
ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; DBI.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
XX
PT 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 169; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGAAGAUGAUGAAGUAC; GAAGAUCUCUCAGUUU;
CC GUACGACACCCGGAGUA; AGAUAUGAUGAAGUACAU; GAAGAUCUCUCAGUUU;
CC CAUGGCCUCUCUUUGA; UCGGCCUCUCUUUGAUU; GAGAUAUGAUGAAGUAC;
CC GGAGAUAUGAUGAAGUAC; and GAAGACUCUCUCAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 9 A; 2 C; 6 G; 0 T; 2 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
```

```
Best Local Similarity 80.0%; Pred. No. 1.2e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
DB 11111111111111111111
4 GAAGAUGCCAUGAAA 18

RESULT 2266
ADQ60590/C
ID ADQ60590 standard; RNA; 19 BP.
XX
AC
XX
ADQ60590;
XX
09-SEP-2004 (first entry)
XX
DE
XX
Anti-Firefly luciferase siRNA Luc 79 SEQ ID NO:289.
XX
ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; firefly; luciferase.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
14-NOV-2003; 2003WO-US036787.
XX
14-NOV-2002; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
WPI; 2004-420527/39.
XX
Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
Example 1; SEQ ID NO 289; 199pp; English.
XX
The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGAGUGAUGAUGAUA; GAAGUACUCCAUUAAG;
CC GUACGACACCGGGAUA; AGAUGAGUGAUGAUGAUA; GAAGACUCUCGACAGUUU;
CC CAUGGCCUCUCUGUUA; UGGGCCUCUCUGUUAUUU; GAGAUGAGUGAUGAUGAUA;
CC GGAGUAGUGAUGAUGAUA; and GAAGACUCUCGACAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 6 A; 2 C; 7 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
DB 11111111111111111111
1 GAAGAUGCCAUGAAA 15

RESULT 2267
ADQ60473
ID ADQ60473 standard; RNA; 19 BP.
XX
AC ADQ60473;
XX
09-SEP-2004 (first entry)
XX
DE
XX
Anti-DBI siRNA DB 52 SEQ ID NO:172.
XX
ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; DBI.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
14-NOV-2003; 2003WO-US036787.
XX
14-NOV-2002; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
WPI; 2004-420527/39.
XX
Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
Example 1; SEQ ID NO 172; 199pp; English.
XX
The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGAGUGAUGAUGAUA; GAAGUACUCCAUUAAG;
CC GUACGACACCGGGAUA; AGAUGAGUGAUGAUGAUA; GAAGACUCUCGACAGUUU;
CC CAUGGCCUCUCUGUUA; UGGGCCUCUCUGUUAUUU; GAGAUGAGUGAUGAUGAUA;
CC GGAGUAGUGAUGAUGAUA; and GAAGACUCUCGACAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 7 A; 3 C; 5 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 80.0%; Pred. No. 1.2e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
RESULT 2268
ADQ61918/c
ID ADQ61918 standard; RNA; 19 BP.
XX
XX ADQ61918;
AC
XX
XX 09-SEP-2004 (first entry)
DT
XX
XX Anti-SLC26A1 siRNA SEQ ID NO:1620.
DE
XX
XX ss: siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference.
KW
XX
XX Synthetic.
OS
XX
XX WO2004045543-A2.
PN
XX
XX 03-JUN-2004.
PD
XX
XX 14-NOV-2003; 2003WO-US036787.
PF
XX
XX 14-NOV-2002; 2002US-0426137P.
PR
XX
XX 10-SEP-2003; 2003US-0502050P.
XX
XX (DHAR-) DHARMACON INC.
PA
XX
XX Anastasia K, Angela R, Devin L, William M, Stephen S;
PI
XX
XX WPI; 2004-420527/39.
XX
XX Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
XX Example 12; SEQ ID NO 1620; 199pp; English.
PS
XX
XX The invention relates to a novel method for selecting siRNA (short
XX interfering RNA) comprising selecting an siRNA molecule of 19-25
XX nucleoside bases by selecting a target gene and measuring the
XX functionality of sequences of 19-25 nucleotides in length that are
XX substantially complementary to a stretch of nucleotides of the target
XX sequence, where the functionality is dependent upon non-target specific
XX criteria. Also claimed are methods for gene-silencing, developing an
XX siRNA algorithm for selecting siRNA, selecting an siRNA with improved
XX functionality, selecting hyperfunctional siRNA, an siRNA molecule
XX effective at silencing Bcl-2, and a kit for gene silencing comprising the
XX siRNA. The siRNA molecule comprises a sequence substantially similar to a
XX sequence consisting of GGGAGUAGUGAUGAGUA; GAAGUACUCCAUUUUAG;
XX GUACGACAAACCGGAGUA; AGAUAGUAGUAGUAGUA; UGAGACUCUGCCAGUUU;
XX CAUGGCGCCUUGUUUGA; UGCGGCCUCUGUUUGAUU; GAGAUAGUGAUGAAGUACA;
XX GGAGAUAGUGAUGAAGUA; and GAAGACUCUGCCAGUUUG. The siRNA molecule
XX comprises a sense strand and an anti-sense strand. The siRNA molecule
XX comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
XX pairs. The kit comprises at least two siRNA, comprising a first optimised
XX siRNA and a second optimised siRNA. The method is useful in selecting
XX siRNA for generating a gene silencing reagent. The present sequence is
XX used in the exemplification of the invention.
XX
XX Sequence 19 BP; 3 A; 6 C; 6 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 927 CCAGCTGCTCCGTGG 941
Db ||||| ||||| |||||
15 CCAGCAGCTCCGTGG 1
RESULT 2269
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```
AAL61769
ID AAL61769 standard; DNA; 20 BP.
XX
XX AAL61769;
AC
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204206.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crks; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
PN
XX
XX 19-JUN-2003.
PD
XX
XX 06-DEC-2002; 2002WO-US039138.
PF
XX
XX 07-DEC-2001; 2001US-00017621.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM, Roach MP;
PI
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crks). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
```



```
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1565 TGCCTGACTCAGGCA 1579
Db 4 TGCCTGAGTCAGGCA 18

RESULT 2270
ADH48267/C
ID ADH48267 standard; DNA; 20 BP.
XX AC ADH48267;
XX DT 25-MAR-2004 (first entry)
XX DE Human GRK6 DNA, antisense oligonucleotide #59.
XX KW Antisense therapy; human; G protein-coupled receptor kinase 6;
XX KW GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction;
XX KW uterine contractility; hypertension; aberrant haematopoiesis;
XX KW antiinflammatory; antiarthritic; antirheumatic; hypotensive;
XX KW phosphorothioate; ss.
XX OS Homo sapiens.
XX FH
XX FT Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "This oligonucleotide has a phosphorothioate
XX FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
XX FT and 3' ends, which are 5 nucleotides in length at each
XX FT end. All cytidine residues are 5-methylcytidines"
XX
XX FN US2003228689-A1.
XX PD 11-DEC-2003.
XX PF 31-MAY-2002; 2002US-00159856.
XX PR 31-MAY-2002; 2002US-00159856.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Dobie KW;
XX PS WPI; 2004-052027/05.
XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
XX PT for treating diabetes, drug addiction, uterine contractility and
XX PT hypertension.
XX
XX PS Example 15; SEQ ID NO 69; 58pp; English.
XX
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
XX CC The antisense compound comprises an antisense oligonucleotide that
XX CC specifically hybridises with the nucleic acid and inhibits the expression
XX CC of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX CC antisense oligonucleotide comprises at least one modified internucleoside
XX CC linkage, preferably a phosphorothioate linkage. It also comprises at
XX CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX CC sugar moiety. The antisense oligonucleotide further comprises at least
XX CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX CC oligonucleotides are useful for the treatment of diseases such as
XX CC rheumatoid arthritis, drug addiction, uterine contractility,
XX CC hypertension, and diseases or conditions arising from aberrant
XX CC haematopoiesis. The present sequence represents an antisense
XX CC oligonucleotide used in the examples of the present invention.
XX
XX SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGC 1041
Db 15 CTGGCTGAGTTGGC 1

RESULT 2271
ADH48321
ID ADH48321 standard; DNA; 20 BP.
XX AC ADH48321;
XX DT 25-MAR-2004 (first entry)
XX DE Human GRK6 DNA target sequence #35.
XX KW Antisense therapy; human; G protein-coupled receptor kinase 6;
XX KW GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction;
XX KW uterine contractility; hypertension; aberrant haematopoiesis;
XX KW antiinflammatory; antiarthritic; antirheumatic; hypotensive; ds.
XX OS Homo sapiens.
XX FH
XX FT US2003228689-A1.
XX FT 11-DEC-2003.
XX PF 31-MAY-2002; 2002US-00159856.
XX PR 31-MAY-2002; 2002US-00159856.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Dobie KW;
XX PS WPI; 2004-052027/05.
XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
XX PT for treating diabetes, drug addiction, uterine contractility and
XX PT hypertension.
XX
XX PS Example 15; SEQ ID NO 123; 58pp; English.
XX
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
XX CC The antisense compound comprises an antisense oligonucleotide that
XX CC specifically hybridises with the nucleic acid and inhibits the expression
XX CC of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX CC antisense oligonucleotide comprises at least one modified internucleoside
XX CC linkage, preferably a phosphorothioate linkage. It also comprises at
XX CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX CC sugar moiety. The antisense oligonucleotide further comprises at least
XX CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX CC oligonucleotides are useful for the treatment of diseases such as
XX CC rheumatoid arthritis, drug addiction, uterine contractility,
XX CC hypertension, and diseases or conditions arising from aberrant
XX CC haematopoiesis. The present sequence represents a human GRK6 DNA target
XX CC sequence for an antisense oligonucleotide.
XX
XX SQ Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGC 1041
Db 6 CTGGCTGAGTTGGC 20
```

```
RESULT 2272
AAQ15414
ID AAQ15414 standard; DNA; 20 BP.
XX AC AAQ15414;
XX AC AAQ15414;
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX DE Probe to mutant sequence #4 of exon 3 of human c-Ha-ras gene.
XX DE DE
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13 a
XX FT /tag= a
XX FT /note= "mutant TaqI site"
XX PN EP461496-A.
XX PD 18-DEC-1991.
XX PF 01-JUN-1991; 91EP-00108976.
XX PR 08-JUN-1990; 90EP-00110907.
XX PA (BEHW ) BEHRINGWERKE AG.
XX PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
XX PI Pourzand C;
XX DR WPI; 1991-370527/51.
XX PT Quantitative determination of DNA sequences - contg. mutationally
XX PT eliminated restriction site(s), chain reaction using polymerase
XX PT amplification and elimination of wild-type sequences.
XX PS Example 2; Page 9; 16pp; English.
XX CC This is one of 12 probes which differ only in the sequence at the TaqI
XX CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
XX CC The "mutant" probes are used to detect the 12 possible base-pair
XX CC mutations potentially induced by treatment of cells with the carcinogen
XX CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
XX SQ Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 970 CTACACGAGACCTC 984
DB 5 CTACACGAGACCTC 19
RESULT 2273
AAQ15283
ID AAQ15283 standard; DNA; 20 BP.
XX AC AAQ15283;
XX AC AAQ15283;
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX DE Probe to wild-type TaqI site of exon 3 of human c-Ha-ras gene.
XX DE DE
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
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```
KW ras oncogene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /tag= a
XX FT /label= TaqI_site
XX PN EP461496-A.
XX PD 18-DEC-1991.
XX PF 01-JUN-1991; 91EP-00108976.
XX PR 08-JUN-1990; 90EP-00110907.
XX PA (BEHW ) BEHRINGWERKE AG.
XX PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
XX PI Pourzand C;
XX DR WPI; 1991-370527/51.
XX PT Quantitative determination of DNA sequences - contg. mutationally
XX PT eliminated restriction site(s), chain reaction using polymerase
XX PT amplification and elimination of wild-type sequences.
XX PS Example 2; Page 9; 16pp; English.
XX CC This probe specifically hybridises to the wild-type TaqI restriction
XX CC corresponding to nucleotides 2508-2511 of human Ha-ras. It is used for
XX CC quantitative determination of a specific region of the c-Ha-ras following
XX CC PCR amplification with nested primers of the target sequence from cells
XX CC treated with the carcinogen ethylnitrosurea. A set of 12 probes are also
XX CC used in the plaque hybridisation which differ only in the sequence at the
XX CC TaqI site in order to detect the 12 possible base-pair mutations.
XX CC (Updated on 25-MAR-2003 to correct PI field.)
XX SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 970 CTACACGAGACCTC 984
DB 5 CTACATCGAGACCTC 19
RESULT 2274
AAQ15416
ID AAQ15416 standard; DNA; 20 BP.
XX AC AAQ15416;
XX AC AAQ15416;
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX DE Probe to mutant sequence #6 of exon 3 of human c-Ha-ras gene.
XX DE DE
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /tag= a
XX FT /note= "mutant TaqI site"
XX PN EP461496-A.
XX
```

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PD 18-DEC-1991.
XX
PF 01-JUN-1991; 91EP-00108976.
XX
PR 08-JUN-1990; 90EP-00110907.
XX
PA (BEHW ) BEHRINGWERKE AG.
XX
PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
PI Pourzand C;
XX
DR WPI; 1991-370527/51.
XX
XX Quantitative determination of DNA sequences - contg. mutationally
PT eliminated restriction site(s), chain reaction using polymerase
PT amplification and elimination of wild-type sequences.
XX
PS Example 2; Page 9; 16pp; English.
XX
CC This is one of 12 probes which differ only in the sequence at the TaqI
CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
CC The "mutant" probes are used to detect the 12 possible base-pair
CC mutations potentially induced by treatment of cells with the carcinogen
CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 970 CTACACCGAGACCTC 984
Db 5 CTACACCGAGACCTC 19
XX
RESULT 2275
AAQ48260
ID AAQ48260 standard; DNA; 20 BP.
XX
AC AAQ48260;
XX
XX 25-MAR-2003 (revised)
DT 16-FEB-1994 (first entry)
XX
XX Glucocerebrosidase gene intron 6 5' antisense PCR primer.
XX
XX Mutant; polymerase chain reaction; PvuII polymorphism; detection;
KW screening method; GC alleles; Gaucher's disease; amplification; ss.
XX
XX Synthetic.
XX
XX EP558257-AL.
PN
XX 01-SEP-1993.
XX
XX 23-FEB-1993; 93EP-00301301.
PF
XX 24-FEB-1992; 92US-00841652.
PR
XX (SCRI ) SCRIPPS RES INST.
XX
PA Beutler E;
PI
XX WPI; 1993-274677/35.
XX
XX Detection of Gaucher's disease - by screening DNA for a substitution of
PT adenine for guanine at position 1 of glucocerebrosidase gene intron 2.
XX
XX Example; Page 14; 42pp; English.
XX
XX The sequence is that of a 5' antisense PCR primer corresponding to a
CC region in the glucocerebrosidase gene exon 6 which was used in amplifying

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CC intron 6 in a PCR to assay the PvuII polymorphism. This method may be
CC used for screening humans to diagnose Gaucher's disease or a heterozygous
CC carrier state. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 189 CAAGACCAATGGTGC 203
Db 2 CAAGACCAATGGAGC 16
XX
RESULT 2276
AAQ56208/c
ID AAQ56208 standard; DNA; 20 BP.
XX
AC AAQ56208;
XX
XX 30-AUG-1994 (first entry)
DT
XX pol amplification primer (Backward).
DE
XX HTLV-I; human T-lymphotropic virus; monoclonal antibody; amplification;
KW PCR; polymerase chain reaction; assay; diagnosis; kit; detection; ss.
XX
XX Synthetic.
XX
XX AU9341863-A.
PN
XX 13-JAN-1994.
PD
XX 09-JUL-1993; 93AU-00041863.
PF
XX 10-JUL-1992; 92AU-00003450.
PR
XX (MENZ-) MENZIES SCHOOL HEALTH RES.
PA
XX Kemp DJ, Bastian IB;
PI
XX WPI; 1994-057700/08.
DR
XX Australian variant of HTLV-I - for developing diagnostic assays and
PT vaccines.
XX
XX Disclosure; Page 25; 43pp; English.
XX
XX The primers (AAQ56207-22) are used to amplify various target sequences of
CC a new specific HTLV-I variant. The virus can be used to develop vaccines
CC and diagnostic aids specific to Australian Aborigines
XX
XX Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 868 CAGTACCTGGATGAC 882
Db 20 CAGTACATGGATGAC 6
XX
RESULT 2277
AAV01136/c
ID AAV01136 standard; DNA; 20 BP.
XX
AC AAV01136;
XX
XX 23-MAR-1998 (first entry)
DT
XX c-RAF protooncogene PCR primer for universal mammalian SRS's.
DE

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CC tagged site (UM-STS) primers. The primers are used to develop genomic  
CC maps, to isolate clones from libraries, to make cross-species comparisons  
CC and to develop additional genetic markers. UM-STS allow genomic  
CC comparisons to be made between more species

XX Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1173 CATCTTCTATGAGAT 1187  
Db 16 CATCTCTATGAGAT 2  
|||||

RESULT 2280  
AAT97944  
ID AAT97944 standard; DNA; 20 BP.

XX AAT97944;  
AC AAT97944;  
XX  
DT 13-MAR-1998 (first entry)

XX PCR primer 4 used to create a probe for huntingtin gene transcripts.  
DE  
XX  
XX Huntingtin gene; IT15 gene; Huntington's disease; trinucleotide repeat;  
KW neurodegenerative disorder; HD; gene therapy; PCR primer; ds.  
XX

OS Synthetic.  
OS Homo sapiens.  
XX  
XX US5686288-A.

PN  
XX  
XX 11-NOV-1997.

XX 20-MAY-1994; 94US-00246982.

XX 05-MAR-1993; 93US-00027498.

PR 01-JUL-1993; 93US-00085000.

XX (GEO ) GEN HOSPITAL CORP.

XX Duiyao MP, Gusella JF, Macdonald ME, Ambrose CM;

XX WPI; 1997-558144/51.

DR Nucleic acid encoding huntingtin protein - useful for gene therapy of  
XX Huntington's disease.

XX Disclosure; Col 8; 112pp; English.

XX PCR primers AAT97941-42 were used to create a 210 bp probe for  
CC transcripts of a novel gene, termed huntingtin or IT15. The huntingtin  
CC reading frame contains a polymorphic (CAG)n trinucleotide repeat with at  
CC least 17 alleles in the normal population, varying from about 11 to 34  
CC CAG copies. Huntington's disease (HD) is a progressive neurodegenerative  
CC disorder characterised by motor disturbance, cognitive loss and  
CC psychiatric manifestations. The genetic defect causing HD is assigned to  
CC chromosome 4. On HD chromosomes, the length of the trinucleotide CAG  
CC repeat is substantially increased, e.g. about 37 to at least 73 copies.  
CC The huntingtin gene and proteins encoded by it, may be used for the  
CC diagnosis or treatment of Huntington's disease. The huntingtin gene is  
CC especially used in gene therapy of a symptomatic or presymptomatic  
CC patient. The method comprises providing a functional huntingtin gene with  
CC a (CAG)n repeat of the normal range of 11-34 copies, or an antisense  
CC sequence, to the desired cells of the patient, in a manner that permits  
CC the expression of the huntingtin protein provided by the gene, or  
CC inhibits expression of the mutated huntingtin gene, for a time and in a  
CC quantity sufficient to provide the huntingtin function to the cells of  
CC the patient

XX Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 340 GACTTGAAGATGGG 354  
Db 3 GACTTGAAGATGTGG 17  
|||||

RESULT 2281  
AAT68356/c  
ID AAT68356 standard; DNA; 20 BP.

XX AAT68356;  
AC AAT68356;  
XX

DT 11-AUG-1997 (first entry)

XX Loci-specific primer for assessing integrity of human Y chromosome.

XX Y chromosome; integrity; chromosome locus; primer; amplification; PCR;  
KW polymerase chain reaction; fertility; azoospermia; oligospermia;  
KW infertile; diagnosis; DYS209; DYS210; DYS211; DYS33; DYS31; SMCX;  
KW DAZ(1); DYS218; DYS219; DYS212; DYS213; DYS214; DYS215; DYS216;  
KW DYS241; DYS198; SRY; DYS197; DYS196; DYS240; DYS271; DYS221; KAL182;  
KW DAZ(2); DYS224; DYS226; DYS227; DYS229; DYS21; DYS230; DAZ(3);  
KW DAZ(4); DAZ(5); SMCY; DYS217; DYS220; DYS223; DYS7; DYS215; DYS7;  
KW DYS237; DAZ(6); DAZ(7); DAZ(8); DAZ(9); DAZ(10); DAZ(11); YRRM1; ZFY;  
KW BKM; ss.

XX Homo sapiens.

XX WO9641007-A1.

PN  
XX  
XX 19-DEC-1996.

XX 06-JUN-1996; 96WO-US009421.

PR 07-JUN-1995; 95US-00472416.

PR 18-SEP-1995; 95US-00531556.

XX (PROM-) PROMEGA CORP.

XX First MK, Agoulunik AI, Muallem A;

XX WPI; 1997-099942/09.

DR Assessing integrity of Y chromosome - by amplification of selected human  
XX chromosome loci by multiplex PCR and comparison with normal control DNA.

XX Claim 2; Page 59; 111pp; English.

XX AAT68355-768368 are a set of primers used in a method for assessing the  
CC integrity of a Y chromosome. The primers are capable of priming the  
CC chromosome loci: DYS53S1, DYS229, DYS21, DYS230, DAZ(3), DAZ(4), DAZ(5)  
CC and MIC2. The method can be used to rapidly and reproducibly assess the  
CC integrity of specific regions of the Y chromosome that are associated  
CC with male fertility. It can be used to assess the integrity of the Y  
CC chromosome in males exhibiting azoospermia or oligospermia (no or very  
CC little spermatozoa in the semen) or to assess the genotype of infants of  
CC phenotypically ambiguous sexuality. The method can also be used in  
CC diagnosis and quality control (kits are provided within the scope of the  
CC invention)

XX Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 18 ATGGACAGGAATGCA 32  
Db 19 ATGGGAAGGAATGCA 5  
|||||



KW CNS disorder; PCR; primer; amplification.  
 XX Synthetic.  
 OS  
 XX US5763174-A.  
 PN  
 XX  
 PD 09-JUN-1998.  
 XX  
 XX 13-NOV-1995; 95US-00555678.  
 PF  
 XX 17-FEB-1994; 94US-00197794.  
 PR 25-JUL-1994; 94US-00280443.  
 PR 01-JUN-1995; 95US-00457459.  
 XX  
 XX (WIST-) WISTAR INST ANATOMY & BIOLOGY.  
 PA  
 XX Nishikura K;  
 PI  
 XX WPI; 1998-347307/30.  
 DR  
 XX  
 XX Diagnosis of disorders characterised by inappropriate expression of  
 PT enzyme - comprises contacting tissue sample with labelled antibodies,  
 PT oligonucleotides or protein reagent and measuring association of enzyme.  
 XX  
 PS Example 10; Col 21; 66pp; English.  
 XX  
 CC The primers AAV27072-V27099 were used in the isolation, amplification and  
 CC characterisation of double-stranded adenosine deaminase (DRADA). DRADA is  
 CC specific for double-stranded RNA and is useful for the diagnosis of  
 CC disorders characterised by inappropriate double-stranded ribonucleic acid  
 CC adenosine deaminase expression. Particularly for diagnosis of certain  
 CC neurological or CNS disorders, e.g. Alzheimer's disease, Huntington's  
 CC disease, subacute sclerosing panencephalitis, measles inclusion body  
 CC encephalitis or stroke, or other neurological conditions associated with  
 CC aging. (Updated on 25-MAR-2003 to correct PF field.)  
 XX  
 SQ Sequence 20 BP; 7 A; 1 C; 9 G; 3 T; 0 U; 0 Other;  
  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
 QY 377 CTTACGCCACGTCCT 391  
 Db |||||  
 19 CTTACGCCACATCCT 5  
  
 RESULT 2285  
 AAV27081  
 ID AAV27081 standard; DNA; 20 BP.  
 XX  
 AC AAV27081;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 16-SEP-1998 (first entry)  
 XX  
 XX Primer YS5.  
 DE  
 XX ss; Human; double-stranded adenosine deaminase; neurological disorder;  
 KW CNS disorder; PCR; primer; amplification.  
 XX  
 XX Synthetic.  
 OS  
 XX US5763174-A.  
 PN  
 XX 09-JUN-1998.  
 PD  
 XX 13-NOV-1995; 95US-00555678.  
 PF  
 XX 17-FEB-1994; 94US-00197794.  
 PR 25-JUL-1994; 94US-00280443.  
 PR 01-JUN-1995; 95US-00457459.  
 XX

PA (WIST-) WISTAR INST ANATOMY & BIOLOGY.  
 XX  
 XX Nishikura K;  
 XX  
 DR WPI; 1998-347307/30.  
 XX  
 XX Diagnosis of disorders characterised by inappropriate expression of  
 PT enzyme - comprises contacting tissue sample with labelled antibodies,  
 PT oligonucleotides or protein reagent and measuring association of enzyme.  
 XX  
 PS Example 10; Col 21; 66pp; English.  
 XX  
 CC The primers AAV27072-V27099 were used in the isolation, amplification and  
 CC characterisation of double-stranded adenosine deaminase (DRADA). DRADA is  
 CC specific for double-stranded RNA and is useful for the diagnosis of  
 CC disorders characterised by inappropriate double-stranded ribonucleic acid  
 CC adenosine deaminase expression. Particularly for diagnosis of certain  
 CC neurological or CNS disorders, e.g. Alzheimer's disease, Huntington's  
 CC disease, subacute sclerosing panencephalitis, measles inclusion body  
 CC encephalitis or stroke, or other neurological conditions associated with  
 CC aging. (Updated on 25-MAR-2003 to correct PF field.)  
 XX  
 SQ Sequence 20 BP; 3 A; 9 C; 1 G; 7 T; 0 U; 0 Other;  
  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
 QY 377 CTTACGCCACGTCCT 391  
 Db |||||  
 2 CTTACGCCACATCCT 16  
  
 RESULT 2286  
 AAV42487/c  
 ID AAV42487 standard; DNA; 20 BP.  
 XX  
 AC AAV42487;  
 XX  
 XX 02-OCT-1998 (first entry)  
 DT  
 XX PCR primer 2 used to amplify human loci DY21 DNA.  
 DE  
 XX Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;  
 KW deletion mutation; male infertility; PCR primer; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX Homo sapiens.  
 XX  
 PN W09824937-A2.  
 XX  
 PD 11-JUN-1998.  
 XX  
 XX 04-DEC-1997; 97WO-US023136.  
 PF  
 XX 04-DEC-1996; 96US-00753979.  
 PR  
 XX (PROM-) PROMEGA CORP.  
 PA  
 XX First MK, Muallem A;  
 PI  
 XX WPI; 1998-333352/29.  
 DR  
 XX Assessing Y chromosome integrity in predicting human male infertility -  
 PT by amplifying specific regions of human Y chromosome linked to normal  
 PT fertility by multiplex PCR and detecting deletion mutations.  
 XX  
 PS Claim 2; Page 30; 47pp; English.  
 XX  
 CC PCR primers AAV42472-511 are used in a method for assessing the integrity  
 CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with  
 CC several distinct oligonucleotide primer pairs capable of simultaneously  
 CC priming several human Y chromosome loci which are linked to normal

CC fertility in human males. The present primer pair (AAV42486-87) amplify  
 CC loci DY21. The primer pairs are amplified by multiplex PCR, yielding  
 CC amplified chromosomal DNA fragments which are isolated and compared with  
 CC those from normal male subjects. The method is useful to detect deletion  
 CC mutations on a Y chromosome which are predictive of human male  
 CC infertility

SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 18 ATGCACAGGATGCA 32  
 ||||| ||||| |||||  
 Db 19 ATGGAAGAAGTATGCA 5

RESULT 2287  
 AAV42508  
 ID AAV42508 standard; DNA; 20 BP.

AC AAV42508;

XX 02-OCT-1998 (first entry)

DE PCR primer 1 used to amplify human loci DYS215 DNA.

XX Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;  
 KW deletion mutation; male infertility; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9824937-A2.

XX 11-JUN-1998.

XX 04-DEC-1997; 97WO-US023136.

XX 04-DEC-1996; 96US-00753979.

XX (PROM-) PROMEGA CORP.

PI First MK, Muallem A;

XX WPI; 1998-333352/29.

XX Assessing Y chromosome integrity in predicting human male infertility -  
 PT by amplifying specific regions of human Y chromosome linked to normal  
 PT fertility by multiplex PCR and detecting deletion mutations.

PS Claim 2; Page 37; 47pp; English.

XX PCR primers AAV42472-511 are used in a method for assessing the integrity  
 CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with  
 CC several distinct oligonucleotide primer pairs capable of simultaneously  
 CC priming several human Y chromosome loci which are linked to normal  
 CC fertility in human males. The present primer pair (AAV42508-09) amplify  
 CC loci DYS215. The primer pairs are amplified by multiplex PCR, yielding  
 CC amplified chromosomal DNA fragments which are isolated and compared with  
 CC those from normal male subjects. The method is useful to detect deletion  
 CC mutations on a Y chromosome which are predictive of human male  
 CC infertility

XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1574 CAGGCAGCCAGCTT 1588  
 ||||| ||||| |||||

Db 1 CAGGCAGGCAGCTT 15

RESULT 2288

AAV05848

ID AAV05848 standard; DNA; 20 BP.

XX AAV05848;

XX 01-JUN-1998 (first entry)

DE 3' primer for human huntingtin gene translocation probe.

KW Human; huntingtin gene; Huntington's disease; chromosome; marker; locus;  
 KW antisense; gene therapy; diagnosis; primer; amplification; PCR; probe;  
 KW hybridisation; translocation; ss.

XX Synthetic.

OS Homo sapiens.

XX US5693757-A.

XX 02-DEC-1997.

XX 30-MAY-1995; 95US-00453265.

XX 05-MAR-1993; 93US-00027498.

XX 01-JUL-1993; 93US-00085000.

XX 20-MAY-1994; 94US-00246982.

XX (GEO) GEN HOSPITAL CORP.

XX Gusella JF, Duyao MP, Ambrose CM, Macdonald ME;

XX WPI; 1998-031815/03.

XX Huntingtin protein and related nucleic acid - for diagnosis or therapy of  
 XX Huntington's disease.

XX Disclosure; Col 8; 112pp; English.

XX Primers AAV05845-46 were used to amplify a 210 bp fragment of the human  
 CC huntingtin gene (AAV05828) for the analysis of a translocation breakpoint  
 CC at locus t(4;12), which disrupts the Huntington's disease (HD) gene. The  
 CC huntingtin protein, or the gene encoding it, is useful for detecting a  
 CC predisposition to develop HD, for diagnosis and treatment of HD,  
 CC especially by antisense and gene therapy

XX Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 340 GACTTGAAGATGGG 354

||||| ||||| |||||  
 Db 3 GACTTGAAGATGGG 17

RESULT 2289

AAV08608

ID AAV08608 standard; DNA; 20 BP.

XX AAV08608;

XX 15-FEB-1999 (first entry)

DE Primer ACE/184PB for human ACE gene.

KW PCR primer; human; ACE; angiotensin converting enzyme; angiotensinogen;  
 KW cardiovascular status; AGT; AT1; type 1 angiotensin II receptor; stroke;  
 KW polymorphic pattern; blood pressure; electrocardiographic profile;  
 KW cardiac condition diagnosis; myocardial infarction; atherosclerosis;



KW hypertension; cardiovascular disease; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN W09845477-A2.  
 XX  
 XX 15-OCT-1998.  
 PD  
 PF 01-APR-1998; 98WO-IB000475.  
 XX  
 XX 04-APR-1997; 97US-0042930P.  
 PR  
 XX (EURO-) EURONA MEDICAL AB.  
 PA  
 XX Norberg LT, Andersson MK, Lindstroem PHR;  
 PI WPI; 1998-568361/48.  
 XX  
 DR Assessing cardiovascular status in humans by polymorphic analysis - of  
 XX genes for angiotensin converting enzyme, angiotensinogen and angiotensin  
 PT II receptor, used to diagnose predisposition to disease and to predict  
 PT effect of therapy.  
 XX  
 XX Example 1; Page 28; 71pp; English.  
 PS  
 XX This sequence represents a PCR primer for the human ACE (angiotensin  
 CC converting enzyme) gene, and can be used in the method of the invention.  
 CC The method is for assessing cardiovascular status in humans by  
 CC determining the sequence of at least one polymorphic site in the ACE  
 CC (angiotensin converting enzyme), AGT (angiotensinogen) and/or AT1 (type 1  
 CC angiotensin II receptor) genes, and comparing the polymorphic pattern  
 CC with that in patients with predetermined markers of status. The method is  
 CC used to assess blood pressure or electrocardiographic profile, to  
 CC diagnose a cardiac condition such as (silent) myocardial infarction (MI),  
 CC hypertension, atherosclerosis or stroke. They can also be used to predict  
 CC response to treatments with ACE inhibitors, angiotensin II receptor  
 CC antagonists, diuretics, alpha- or beta-adrenergic receptor antagonists,  
 CC etc. It is also used to identify susceptibility to cardiovascular  
 CC disease. Libraries of nucleic acids containing polymorphic positions in  
 CC the 3 genes, and libraries of targets corresponding to the peptides from  
 CC the genes are used to screen for cardiovascular agents. The nucleic acids  
 CC contained in the library can be used as source of probes  
 XX  
 SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1544 CCAGCCTTGGGTCTT 1558  
 Db | | | | | | | | | |  
 4 CCAGCCTTGGGTCTT 18  
 RESULT 2290  
 AAZ31321  
 ID AAZ31321 standard; DNA; 20 BP.  
 XX  
 AC AAZ31321;  
 XX  
 DT 24-JAN-2000 (first entry)  
 XX  
 DE CXCR4 gene inhibiting antisense oligo AS(s)-78.  
 XX  
 KW HIV cofactor inhibitor; HIV infection; CXCR4 gene; CCR5 gene;  
 KW drug composition; antisense; ss.  
 XX  
 OS Synthetic.  
 OS  
 PN W09951751-A1.  
 XX  
 PD 14-OCT-1999.

XX  
 PF 01-APR-1999; 99WO-JF001722.  
 XX  
 PR 02-APR-1998; 98JP-00125452.  
 XX  
 PA (MARI-) MARINE BIO CO LTD.  
 XX  
 XX Takaku H, Yamamoto N, Kimura T, Takai K, Wada A;  
 PI WPI; 1999-620207/53.  
 XX  
 DR Antisense oligonucleotide-based HIV cofactor inhibitors, as drug  
 PT compositions for treatment of HIV infection.  
 PT  
 XX Claim 6; Page 17; 59pp; Japanese.  
 PS  
 XX The invention provides HIV cofactor inhibitors that contain  
 CC oligonucleotides with a base sequence complementary to the CXCR4 or CCR5  
 CC genes. Such inhibitors can be formulated into drug compositions for  
 CC prevention or treatment of HIV infection, with inhibition of expression  
 CC of CXCR4 or/and CCR5 gene. Sequences AAZ31307-362 represent antisense  
 CC oligonucleotides to the CXCR4 gene  
 XX  
 SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1378 GGGCGCGACTCTCTC 1392  
 Db | | | | | | | | | |  
 6 GTGGCGGACTCTCTC 20  
 RESULT 2291  
 AAZ05007  
 ID AAZ05007 standard; DNA; 20 BP.  
 XX  
 AC AAZ05007;  
 XX  
 DT 07-OCT-1999 (first entry)  
 XX  
 DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
 XX  
 KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
 KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
 XX  
 OS Synthetic.  
 OS Chlamydia trachomatis.  
 XX  
 XX W09928475-A2.  
 PN  
 XX 10-JUN-1999.  
 PD  
 XX 27-NOV-1998; 98WO-IB001939.  
 PF  
 XX 28-NOV-1997; 97FR-00015041.  
 PR 17-DEC-1997; 97FR-00016034.  
 PR 04-NOV-1998; 98US-0107077P.  
 XX  
 XX (GEST ) GENSET.  
 PA  
 XX Griffais R;  
 PI  
 XX WPI, 1999-371125/31.  
 DR  
 XX Genome sequence of Chlamydia trachomatis.  
 PT  
 XX Disclosure; Page 1735; 1755pp; English.  
 PS  
 XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
 CC

CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs  
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
 CC be used to control growth of the microorganism. Chlamydia trachomatis is  
 CC responsible for a large number of diseases, e.g. eye diseases such as  
 CC conjunctivitis, noninfectious trachoma, paratrachoma, and inclusion  
 CC diseases such as nongonococcal urethritis,  
 CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis,  
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
 CC The polypeptides of the invention may be of use in treating these  
 CC diseases

SQ Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 220 CTGGATGAGATGGT 234  
 |||||  
 Db 1 CTGGATGATGGT 15

RESULT 2292  
 AAX23146  
 ID AAX23146 standard; DNA; 20 BP.

AC AAX23146;

XX 11-JUN-1999 (first entry)

XX Rat high/low molecular weight kininogen PCR primer #1.

XX Kallikrein; rat; atrial natriuretic peptide; treatment; renal disorder;  
 KW cardiac disorder; nephrotoxicity; renal damage; tubular injury; ischemia;  
 KW glomerulosclerotic lesion; renal failure; nephrotic syndrome; restenosis;  
 KW diabetic nephropathy; cardiac hypertrophy; heart failure; angioplasty;  
 KW myocardial infarction; cerebrovascular disorder; tubular regeneration;  
 KW occlusive artery disorder; vascular smooth muscle cell growth;  
 KW neointimal formation; blood vessel; kininogen; PCR primer; ss.

OS Synthetic.  
 OS Rattus sp.

XX WO9912576-A2.

XX 18-MAR-1999.

XX 11-SEP-1998; 98WO-US019267.

XX 11-SEP-1997; 97US-0058511P.

XX (MUSC-) MUSC FOUND RES DEV.

XX Chao L, Chao J;

XX WPI; 1999-214919/18.

XX Delivering tissue kallikrein and atrial natriuretic peptide to a cell -  
 PT for prevention and treatment of non-hypertension-associated renal and  
 PT cardiac disorders.

XX Example 1; Page 63; 120pp; English.

XX This invention describes a novel method for delivering tissue kallikrein  
 CC and atrial natriuretic peptide to a cell which can be used in the  
 CC treatment of non-hypertension-associated renal and cardiac disorders. Non  
 CC treatment of non-hypertension-associated renal disorders include renal injury,  
 CC nephrotoxicity, nonhypertension-associated renal disease, salt-induced  
 CC renal damage, glomerulosclerotic lesions, tubular injury, drug-induced  
 CC renal damage, chronic renal failure, nephrotic syndrome and diabetic  
 CC nephropathy, and non-hypertension-associated cardiac disorders include  
 CC cardiac hypertrophy, nonhypertension-associated cardiac disease, heart

CC failure after cardiac surgery, cardiac injury after myocardial  
 CC infarction, myocardial ischemia, congestive heart failure and restenosis  
 CC following angioplasty. The encoding nucleic acids can also be used for  
 CC preventing and/or treating the following: cerebrovascular disorders,  
 CC occlusive artery disorders e.g. restenosis, renal damage and/or renal  
 CC injury caused by drug induced and/or salt-induced nephrotoxicity and  
 CC chronic renal failure and inhibiting vascular smooth muscle cell growth  
 CC and/or inhibiting neointimal formation in blood vessel and stimulating  
 CC renal tubular regeneration and/or reversing pre-existing renal injury

SQ Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 307 CCACCTCAGCTCTGCA 321  
 |||||  
 Db 2 CCACCCAGCTCTGCA 16

RESULT 2293  
 AAX23149  
 ID AAX23149 standard; DNA; 20 BP.

AC AAX23149;

XX 11-JUN-1999 (first entry)

XX Rat T kininogen PCR primer #1.

XX Kallikrein; rat; atrial natriuretic peptide; treatment; renal disorder;  
 KW cardiac disorder; nephrotoxicity; renal damage; tubular injury; ischemia;  
 KW glomerulosclerotic lesion; renal failure; nephrotic syndrome; restenosis;  
 KW diabetic nephropathy; cardiac hypertrophy; heart failure; angioplasty;  
 KW myocardial infarction; cerebrovascular disorder; tubular regeneration;  
 KW occlusive artery disorder; vascular smooth muscle cell growth;  
 KW neointimal formation; blood vessel; T kininogen; PCR primer; ss.

OS Synthetic.  
 OS Rattus sp.

XX WO9912576-A2.

XX 18-MAR-1999.

XX 11-SEP-1998; 98WO-US019267.

XX 11-SEP-1997; 97US-0058511P.

XX (MUSC-) MUSC FOUND RES DEV.

XX Chao L, Chao J;

XX WPI; 1999-214919/18.

XX Delivering tissue kallikrein and atrial natriuretic peptide to a cell -  
 PT for prevention and treatment of non-hypertension-associated renal and  
 PT cardiac disorders.

XX Example 1; Page 63; 120pp; English.

XX This invention describes a novel method for delivering tissue kallikrein  
 CC and atrial natriuretic peptide to a cell which can be used in the  
 CC treatment of non-hypertension-associated renal and cardiac disorders. Non  
 CC treatment of non-hypertension-associated renal disorders include renal injury,  
 CC nephrotoxicity, nonhypertension-associated renal disease, salt-induced  
 CC renal damage, glomerulosclerotic lesions, tubular injury, drug-induced  
 CC renal damage, chronic renal failure, nephrotic syndrome and diabetic  
 CC nephropathy, and non-hypertension-associated cardiac disorders include  
 CC cardiac hypertrophy, nonhypertension-associated cardiac disease, heart  
 CC failure after cardiac surgery, cardiac injury after myocardial  
 CC infarction, myocardial ischemia, congestive heart failure and restenosis

CC following angioplasty. The encoding nucleic acids can also be used for  
 CC preventing and or treating the following: cerebrovascular disorders,  
 CC occlusive artery disorders e.g. restenosis, renal damage and/or renal  
 CC injury caused by drug induced and/or salt-induced nephrotoxicity and  
 CC chronic renal failure and inhibiting vascular smooth muscle cell growth  
 CC and/or inhibiting neointimal formation in blood vessel and stimulating  
 CC renal tubular regeneration and/or reversing pre-existing renal injury  
 XX

SQ Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 307 CCACTCAGCTCTGCA 321  
 DB 2 CCACCCAGCTCTGCA 16  
 ||||| ||||| |||||

RESULT 2294  
 AAX23551/c  
 ID AAX23551 standard; DNA; 20 BP.  
 AC AAX23551;  
 XX  
 XX  
 DT 18-JUN-1999 (first entry)  
 XX  
 DE Deletion sequence oligonucleotide 4.

KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;  
 KW probe; cellular adhesion modulator; cellular proliferation modulator;  
 KW human retrovirus; human immunodeficiency virus; non-human retrovirus;  
 KW HIV; primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 FN WO9911820-A1.  
 XX  
 PD 11-MAR-1999.  
 XX  
 PF 01-SEP-1998; 98WO-US018084.  
 XX  
 PR 02-SEP-1997; 97US-00923771.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Chen D, Srivatsa GS;  
 XX  
 DR WPI; 1999-205198/17.  
 XX

PT New compositions comprising sensor arrays made up of unique probe  
 PT oligonucleotides - useful for characterizing a sample of target deletion  
 PT oligonucleotides.

PS Example 1; Page 90; 163pp; English.

XX This invention describes a novel composition comprising a number of  
 CC sensor arrays, where each array comprises a unique probe oligonucleotide,  
 CC which is the reverse complement of part of a unique target  
 CC oligonucleotide present in a mixture of target deletion sequence  
 CC oligonucleotides. The compositions form a method for characterizing a  
 CC sample of target deletion oligonucleotides which are labelled and  
 CC hybridize with the probe oligonucleotides of the sensor arrays. Such  
 CC oligonucleotides and their targets are represented in AAX23548-X23709.  
 CC Oligonucleotides characterized by the method form pharmaceutical  
 CC compositions that are useful for modulating cellular adhesion or  
 CC proliferation, and being active against a eukaryotic pathogen, a human  
 CC retrovirus, a human immunodeficiency virus (HIV), or a non-human  
 CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory  
 CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable  
 CC characterization of deletion sequence oligonucleotides having related,  
 CC but different nucleobase sequences, and quantification of different  
 CC species of deletion sequence ("target") oligonucleotides in a mixture.

CC Also, if the specificity of the oligonucleotide's nucleobase sequence for  
 CC its reverse complement is not modified, the method may be performed using  
 CC oligodeoxynucleotides

SQ Sequence 20 BP; 0 A; 6 C; 5 G; 9 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 135 GAAGAAGATCAACG 149  
 DB 16 GAAGAAGACAAACG 2  
 ||||| ||||| |||||

RESULT 2295  
 AAX93254  
 ID AAX93254 standard; DNA; 20 BP.  
 AC AAX93254;  
 XX  
 XX  
 DT 13-SEP-1999 (first entry)  
 XX

DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
 XX  
 KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
 KW neutralising epitope; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Chlamydia pneumoniae.  
 XX  
 FN WO9927105-A2.  
 XX  
 PD 03-JUN-1999.  
 XX  
 PF 20-NOV-1998; 98WO-IB001890.  
 XX  
 PR 21-NOV-1997; 97FR-00014673.  
 PR 04-NOV-1998; 98US-0107078P.  
 XX  
 PA (GEST ) GENSET.  
 XX  
 PI Griffais R;  
 XX  
 DR WPI; 1999-357842/30.  
 XX

PT Genome sequence of Chlamydia pneumoniae.

PS Page 1575; Disclosure; 1912pp; English.

XX AAX91991-X97517 represent PCR primers used to amplify open reading frames  
 CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
 CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
 CC pneumonia and bronchitis and is thought to be a contributing factor in  
 CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
 CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
 CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
 CC nucleotides sequences can also be used as immunogenic compositions,  
 CC especially where the vector directs the expression of a neutralising  
 CC epitope of C. pneumoniae

SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1224 GGAGGAACAGCTACA 1238  
 DB 1 GGAAGAACAGCTACA 15  
 ||||| ||||| |||||

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RESULT 2296
AAAX96164/c
ID AAX96164 standard; DNA; 20 BP.
XX
XX AC AAX96164;
XX
XX DT 13-SEP-1999 (first entry)
XX
XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX KW neutralising epitope; PCR primer; ss.
XX
XX OS Synthetic.
XX OS Chlamydophila pneumoniae.
XX
XX PN WO9927105-A2.
XX
XX PD 03-JUN-1999.
XX
XX BF 20-NOV-1998; 98WO-IB001890.
XX
XX PR 21-NOV-1997; 97FR-00014673.
XX PR 04-NOV-1998; 98US-0107078P.
XX
XX PA (GEST ) GENSET.
XX
XX PI Griffais R;
XX
XX DR WPI; 1999-357842/30.
XX
XX PT Genome sequence of Chlamydia pneumoniae.
XX
XX PS Page 1804; Disclosure; 1912pp; English.
XX
XX CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX CC (see AAX91990). C. pneumoniae causes respiratory disease such as
XX CC pneumonia and bronchitis and is thought to be a contributing factor in
XX CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX CC nodosum or pharyngitis. The polypeptides encoded by the open reading
XX CC frames of the C. pneumoniae genome (see AAX34584 - AAX35979) can be used
XX CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX CC nucleotide sequences can also be used as immunogenic compositions,
XX CC especially where the vector directs the expression of a neutralising
XX CC epitope of C. pneumoniae
XX
XX SQ Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 778 AAACACGCCACATC 792
DB 20 AAACATGCCACATC 6

RESULT 2297
AAAX40720
ID AAA40720 standard; DNA; 20 BP.
XX
XX AC AAA40720;
XX
XX DT 15-AUG-2000 (first entry)
XX
XX DE Mouse multidrug resistance protein primer SEQ ID NO:157.
XX
XX KW Human; rat; CD36; SHR; spontaneous hypertensive rat; diagnosis; therapy;
XX KW screening; polymorphism; variant; detection; mutant; blood; mutation;
XX KW insulin; glucose metabolism; fatty acid metabolism; catecholamine;

```

```

KW malaria; infection; parasite; antiparasitic; antidiabetic; primer; ss.
XX
XX OS Mus sp.
XX
XX PN WO200019883-A2.
XX
XX PD 13-APR-2000.
XX
XX PP 07-OCT-1999; 99WO-US023418.
XX
XX PR 07-OCT-1998; 98US-00167750.
XX PR 28-DEC-1998; 98US-00221222.
XX PR 17-MAR-1999; 99US-00270542.
XX
XX PA (MEDI-) MEDICAL RES COUNCIL.
XX PA (SCIO-) SCIOS INC.
XX PA (AITM/) AITMAN T J.
XX PA (SCOT/) SCOTT J.
XX PA (STAN/) STANTON L W.
XX
XX PI Aitman TJ, Scott J, Stanton LW;
XX
XX DR WPI; 2000-303596/26.
XX
XX PT Nucleic acids encoding mutant CD36 proteins useful for preventing,
XX PT diagnosing and treating parasitic infections, especially malaria.
XX
XX PS Example 1; Page 125; 167pp; English.
XX
XX CC The present invention describes isolated nucleic acid molecules (A)
XX CC encoding mutant CD36 proteins (B). Parasites such as Plasmodium
XX CC falciparum (the major cause of malaria) are unable to utilise the mutated
XX CC proteins to gain entry to, and infect cells. The mutant CD36 proteins do
XX CC not function correctly preventing parasites utilising them to infect
XX CC cells. The nucleic acids may be used for the recombinant production of
XX CC mutant CD36 proteins according to standard methodologies. They may be
XX CC used in this way to prevent and treat parasitic infections that utilise
XX CC the CD36 protein to infect cells, such as P. falciparum, the major cause
XX CC of malaria. For example, the protein may be used to identify modulators
XX CC of CD36 expression and activity or a patient's CD36 DNA may be screened
XX CC to determine whether there are any mutations present that may confer
XX CC resistance to parasitic infections. The proteins and nucleic acids may
XX CC also be used to prevent, diagnose and treat diseases associated with
XX CC defects in insulin action and/or glucose metabolism and/or fatty acid
XX CC metabolism and/or catecholamine action in subjects possessing mutations
XX CC in the CD36 genes. AAA40606 to AAA40759, and AAB02515 to AAB02564,
XX CC represent nucleotide and amino acid sequences respectively which are used
XX CC in the exemplification of the present invention
XX
XX SQ Sequence 20 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 538 CCCATCTTTCACAAAG 552
DB 4 CCCATCTTTCAGAG 18

RESULT 2298
AAZ72882/c
ID AAZ72882 standard; DNA; 20 BP.
XX
XX AC AAZ72882;
XX
XX DT 10-SEP-2001 (first entry)
XX
XX DE Human biallelic marker upstream amplification primer SEQ ID NO:7238.
XX
XX KW Human genome; biallelic marker; high density disequilibrium map;
XX KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KW haplotyping; hybridisation; identification; characterisation;

```

KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
XX diagnosis; ss.

OS Homo sapiens.

PN WO9954500-A2.

XX 28-OCT-1999.

PD 21-APR-1999; 99WO-IB000822.

XX 21-APR-1998; 98US-0082614P.

PR 23-NOV-1998; 98US-0109732P.

XX (GEST ) GENSET.

PI Cohen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.

PS Claim 9; Page 1774; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterization of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention

XX Sequence 20 BP; 9 A; 0 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1235 TACACTTCATCTTCC 1249

Db 17 TTCACCTTCATCTTCC 3

RESULT 2299

AAA79748/C

ID AAA79748 standard; DNA; 20 BP.

XX AAA79748;

XX 20-NOV-2000 (first entry)

XX Hepatitis B virus related oligonucleotide probe #11.

XX Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;  
KW mutation; high-density gene chip; ss.

XX Hepatitis B virus.

OS CN1252452-A.

PN 10-MAY-2000.

XX 24-SEP-1999; 99CN-00114460.

XX

PR 24-SEP-1999; 99CN-00114460.

XX (UYDO-) UNIV DONGNAN.

XX Sun X, Lu Z, Wang Y;

XX WPI; 2000-443233/39.

XX High-density gene chip making process.

XX Example 1; Fig 15; 19pp; Chinese.

XX The present invention describes a method which comprises making a high-  
CC density gene chip, specifically for making high-density micro-array of  
CC oligonucleotide probes. An oligonucleotide probe selecting process to  
CC seek preferentially length variable and coverage variable probes is  
CC provided to ensure identical cross melting temperature of probes to the  
CC maximum limit, and this can make the cross control of gene chip  
CC relatively simple and raise the reliability of the gene chip detecting  
CC results. The process proposes a specific probe selection method for  
CC detecting target sequence directly, detecting mutation in both specific  
CC and non-specific sites and a probe overall arrangement scheme. AAA79738  
CC to AAA80201 represent oligonucleotide probe sequences which are used in  
CC examples from the present invention

XX Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 828 CCTCACCCCTTGTCTT 842

Db 15 CCTAACCCCTTGTCTT 1

RESULT 2300

AAA38236

ID AAA38236 standard; DNA; 20 BP.

XX AAA38236;

XX 21-AUG-2000 (first entry)

XX Human angiotensin-converting enzyme (ACE) PCR primer, SEQ ID NO:36.

XX Angiotensin-converting enzyme gene; ACE; polymorphism;  
KW polymorphic marker; cardiovascular disease; myocardial infarction;  
KW unstable angina; hypertension; atherosclerosis; stroke; prognosis;  
KW drug screening; treatment outcome; human; PCR primer; ss.

OS Homo sapiens.

XX WO200022166-A2.

XX 20-APR-2000.

XX 13-OCT-1999; 99WO-IB001678.

XX 14-OCT-1998; 98US-0104286P.

XX 14-OCT-1998; 98US-0104302P.

XX (EURO-) EURONA MEDICAL AB.

XX Norberg LT, Andersson MK, Lindstrom PHR, Jonsson L;  
PI WPI; 2000-318010/27.

XX Assessing cardiovascular status in humans involves comparing test

XX polymorphic pattern comprising polymorphic positions within genes  
PT encoding specific proteins, with reference polymorphic pattern.

XX Example 1; Page 49; 126pp; English.

XX The invention relates to a novel method of assessing the cardiovascular  
 CC status in an individual and to newly identified polymorphisms in the  
 CC genes encoding angiotensin-converting enzyme (ACE), angiotensin II  
 CC receptor type 1 (AT1) and type 2 (AT2), angiotensinogen (AGT), renin,  
 CC aldosterone synthase, endothelin receptor type A and beta-adrenergic  
 CC receptors 1 and 2. The method comprises determining the sequence at one  
 CC or more polymorphic positions within these genes, and comparing the  
 CC pattern of polymorphisms from the individual with a reference polymorphic  
 CC pattern obtained from a population of individuals exhibiting a  
 CC predetermined cardiovascular disease status. The polymorphic markers are  
 CC useful for determining the predisposition of an individual to  
 CC cardiovascular disorders such as myocardial infarction, unstable angina,  
 CC hypertension, atherosclerosis and stroke. They are also useful for  
 CC predicting the likely cardiovascular status of a patient given a  
 CC treatment regimen comprising administration of cardiovascular drugs  
 CC (e.g., ACE inhibitors, beta-adrenergic receptor antagonists (beta-  
 CC blockers) or calcium channel blockers). One or more polymorphic markers  
 CC provides a basis for predicting the outcome of a treatment regimen.  
 CC Fragments of the genes comprising a polymorphic site may be used as  
 CC primers and probes for detecting genetic polymorphisms or in molecular  
 CC library arrays for high throughput screening. The genes, and the proteins  
 CC they encode are useful in the screening of potential cardiovascular  
 CC drugs. Determination of an individual's polymorphic pattern reduces or  
 CC eliminates trial and error in selecting a treatment for a particular  
 CC individual cardiovascular patient. It also provides the ability to  
 CC eliminate patients from clinical trials who are predicted to be non-  
 CC responsive, or at a risk for an adverse response, to a particular  
 CC treatment regimen. Adverse results in an early trial can be evaluated to  
 CC identify polymorphic patterns so that the adverse results can be  
 CC correlated with a sub-population of the test population, permitting  
 CC exclusion of such sub-populations from the treatment group. Beneficial  
 CC drugs can be approved for use in the appropriate population, thereby  
 CC decreasing the number of patients required for a clinical trial, which in  
 CC turn decreases the duration and cost of such trials. Sequences AAA38201-  
 CC A38239 represent PCR primers used in an exemplification of the invention  
 CC to amplify short fragments of the human ACE gene (AAA38328- AAA38330) for  
 CC sequence determination

XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1544 CCAGCCTTCGGTCTT 1558  
 |||||  
 Db 4 CCAGCCTTCGGTCTT 18

RESULT 2301  
 AAC61236  
 ID AAC61236 standard; DNA; 20 BP.  
 AC AAC61236;  
 XX  
 XX 30-JAN-2001 (first entry)  
 DT  
 DE Human ACE, AGT and AT1 genes polymorphisms PCR primer SEQ ID NO: 36.  
 XX Human; genetic polymorphism; disease diagnosis; treatment; cancer;  
 KW cardiovascular system; nervous system; glaucoma; PCR primer; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200056922-A2.  
 PN  
 XX 28-SEP-2000.  
 FD  
 XX 23-MAR-2000; 2000WO-GB001102.  
 XX  
 XX 23-MAR-1999; 99US-0126046P.  
 PR 23-MAR-1999; 99WO-1B000497.  
 PR

PR 24-MAR-1999; 99US-0126243P.  
 XX 23-DEC-1999; 99US-00471890.  
 PA (GEMI-) GEMINI GENOMICS AB.  
 XX Lindstrom PHR, Norberg LT, Jonsson L, Olaisson E, Sanders R;  
 XX WPI; 2000-638268/61.  
 DR  
 XX Assessing disease status in individual by determining sequence(s) at one  
 XX or more polymorphic positions within the human genes encoding the  
 XX protein(s) involved in physiological pathway associated with treatment  
 XX regime.  
 XX Example 1; Page 56; 141pp; English.  
 PS  
 XX The present invention is related to methods for determining the  
 XX polymorphic pattern of an individual and using the results to determine  
 XX their risk of a number of diseases, including cancer, cardiovascular  
 XX diseases, glaucoma and nervous system disorders such as depression and  
 XX neurodegenerative diseases. In addition, the methods can be used to  
 XX determine the effects of different types of treatment for individuals,  
 XX and thus enables appropriate therapies to be prescribed. The PCR primers  
 XX shown in sequences AAC61201-C61371 were all used to demonstrate the  
 XX methods of the invention

XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1544 CCAGCCTTCGGTCTT 1558  
 |||||  
 Db 4 CCAGCCTTCGGTCTT 18

RESULT 2302  
 AAA95391/c  
 ID AAA95391 standard; DNA; 20 BP.  
 XX AAA95391;  
 XX  
 XX 12-FEB-2001 (first entry)  
 DT  
 DE Rat FGFR coding sequence PCR primer #2.  
 XX  
 XX Rat; Nurr1; tyrosine hydroxylase; catecholamine-related disease;  
 KW Parkinson's disease; manic depression; schizophrenia; PCR primer; ss.  
 XX Rattus norvegicus.  
 OS  
 XX WO200058451-A1.  
 PN  
 XX 05-OCT-2000.  
 PD  
 XX 21-MAR-2000; 2000WO-US007544.  
 PF  
 XX 26-MAR-1999; 99US-00277078.  
 PR  
 XX (SALK ) SALK INST BIOLOGICAL STUDIES.  
 PA  
 XX Sakurada K, Palmer T, Gage FH;  
 PI  
 XX WPI; 2000-656165/63.  
 DR  
 XX Cell comprising exogenous nucleic acid inducing tyrosine hydroxylase  
 XX expression useful for treating catecholamine-related diseases such as  
 XX Parkinson's disease, manic depression and schizophrenia.  
 XX Example 1; Page 20; 68pp; English.  
 PS  
 XX The present invention describes the rat Nurr1 coding and protein  
 CC

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;

XX  
AC  
XX

```
DT 07-FEB-2001 (first entry)
XX Murine p38beta antisense oligonucleotide SEQ ID 65.
DE
XX
XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;
KW antiarthritis; antiarthritis; immunosuppressive; cardiant; heart disease;
KW antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
KW phosphorothioate; ss.
XX
XX Mus sp.
OS
XX WO200059919-A1.
XX
XX 12-OCT-2000.
XX
XX 04-APR-2000; 2000WO-US008794.
XX
XX 06-APR-1999; 99US-00286904.
XX
XX (ISTS-) ISIS PHARM INC.
XX
XX Monia BP, Gaarde WA, Nero PS, Mckay R, Popoff I;
XX WPI; 2000-664982/64.
XX
XX Antisense compound targeted to p38 mitogen activated protein kinase
PT inhibits protein kinase and is useful for diagnosing and treating
PT inflammatory, autoimmune and heart disease.
XX
XX Example 5; Page 53; 90pp; English.
XX
XX This invention relates to antisense compounds 8-30 nucleobases in length
CC targeted to the 5'-untranslated region, translational start site,
CC translational termination region or 3'-untranslated region of a nucleic
CC acid encoding a p38 mitogen activated protein kinase (MAPK), where the
CC antisense oligonucleotides inhibit the expression of MAPK. Sequences
CC AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA
CC sequences. AAC79481 - AAC79500 and AAC79553 - AAC79570 represent human
CC p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and
CC AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides.
CC Also included in the invention are a p38alpha cDNA sequence AAC79523 and
CC antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.
CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense
CC oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.
CC The antisense oligonucleotides have antiarthritis; antiarthritis;
CC immunosuppressive; cardiant and antiinflammatory activity. The antisense
CC oligonucleotides are useful for inhibiting the expression of p38 MAPK in
CC cells or tissues. The oligonucleotides are used for treating an animal
CC with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid
CC arthritis, or heart disease. The oligonucleotides are also useful for
CC inhibiting inflammation or apoptosis
XX
XX Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1638 GCAGCGGCTGCAGGG 1652
Db 15 GCAGCGGCTGCAGGG 1

RESULT 2306
AAF55056
ID AAF55056 standard; DNA; 20 BP.
XX
XX AAF55056;
AC
XX 15-MAY-2001 (first entry)
DT
XX PCR primer used to amplify a fragment of the mumps genome.
DE
XX
```

```
KW Encapsidation protein; transcription protein; replication protein;
KW cell targeting; gene therapy; attenuated virus; vaccine; mumps;
KW PCR primer; ss.
XX
OS Mumps virus.
XX
PN WO200109309-A2.
XX
PD 08-FEB-2001.
XX
XX 02-AUG-2000; 2000WO-US021192.
XX
XX 02-AUG-1999; 99US-0146664P.
XX
XX 23-JUN-2000; 2000US-0213654P.
XX
XX (AMHP ) AMERICAN HOME PROD CORP.
XX
XX Clarke DK, Johnson EJ, Sidhu MS, Udem SA;
XX WPI; 2001-123320/13.
XX
XX Producing a recombinant mumps virus (MUV), useful as a mumps vaccine, by
PT transfecting or transforming a host cell with a transcription vector
PT comprising a MUV genome or antigenome, and an expression vector encoding
PT trans-acting proteins.
XX
XX Example 1; Page 37; 133pp; English.
XX
XX PCR primers AAF55055-56 were used to amplify a fragment of the Mumps
CC virus genome. The amplified fragment was used in the course of the
CC invention. The specification describes a method for producing a
CC recombinant mumps virus. The method comprises transfecting or
CC transforming, in a rescue composition media, a host cell with a
CC transcription vector comprising a genome or antigenome of mumps virus,
CC and an expression vector encoding trans-acting proteins (NP, P and L)
CC necessary for encapsidation, transcription and replication. The method is
CC carried out under conditions sufficient to permit the co-expression of
CC the vectors and the production of the recombinant virus. The recombinant
CC virus has an ability to induce long-lasting immunity with a single dose
CC and a relatively low level of genome recombination. The recombinant
CC produced Mumps viruses are useful in antibody generation, diagnostic,
CC prophylactic and therapeutic applications, cell targeting, gene therapy,
CC mutant virus preparation and immunogenic composition preparation. The
CC method may also produce an attenuated virus for use as a vaccine for
CC preventing or ameliorating mumps infection
XX
XX Sequence 20 BP; 1 A; 11 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 828 CCTCACCCCTGTCTT 842
Db 5 CCTCACCCCTGTCTT 19

RESULT 2307
AAH75317
ID AAH75317 standard; DNA; 20 BP.
XX
XX AAH75317;
AC
XX 02-OCT-2001 (first entry)
DT
XX Mouse inducible NOS antisense oligonucleotide SEQ ID NO 161.
DE
XX Antisense oligonucleotide; inducible nitric oxide synthase; NOS;
KW modulate expression; immunomodulator; antidiabetic; cardiovascular;
KW cardiant; neuroprotective; vasotropic; ischaemia; reperfusion injury;
KW 2'-O-methoxyethyl; phosphorothioate; mouse; ss.
XX
XX Mus sp.
OS
```



```

XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone, 5' and 3' five
XX FT nucleotide 2'-MOE (2'-O-methoxyethyl) wings, all cytidine
XX FT residues are 5-methylcytidines and a deoxy gap"
XX PN WO200152902-A1.
XX PD 26-JUL-2001.
XX PF 15-JAN-2001; 2001WO-US001381.
XX PR 24-JAN-2000; 2000US-00490208.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Dean NM, Cowsett LM;
XX PI WPI; 2001-465340/50.
XX DR
XX PT New antisense oligonucleotides for modulating the expression of inducible
XX PT nitric oxide synthase in cells or tissues, particularly useful for
XX PT treating e.g. immunological, cardiovascular or neurological disorders, or
XX PT ischemia.
XX PS Example 17; Page 87; 144pp; English.
XX CC The invention relates to antisense compounds, especially
XX CC oligonucleotides, which are targeted to a nucleic acid encoding inducible
XX CC nitric oxide synthase and which specifically hybridize to and modulate
XX CC expression of inducible nitric oxide synthase. The antisense compounds
XX CC have immunomodulator, antidiabetic, cardiovascular, cardiant,
XX CC neuroprotective, disorder and vasotropic activity. The antisense
XX CC oligonucleotides are useful for inhibiting the expression of inducible
XX CC nitric oxide synthase in cells or tissues. In particular, the antisense
XX CC oligonucleotides are useful for treating diseases or disorders associated
XX CC with inducible nitric oxide synthase, e.g. diabetes, immunological
XX CC disorder, cardiovascular disorder, neurological disorder or
XX CC ischaemia/reperfusion injury. The antisense oligonucleotides are also
XX CC useful for research and diagnostics. The present sequence is that of an
XX CC antisense 2'-O-methoxyethyl gapper oligonucleotide with a
XX CC phosphorothioate backbone, a central "gap" region of ten nucleotides
XX CC flanked by five nucleotide 2'-MOE (2'-methoxyethyl) wings and 5-
XX CC methylcytidine residues throughout the oligonucleotide. The antisense
XX CC oligonucleotide is targeted to mouse inducible nitric oxide synthase (NOS)
XX CC mRNA (AAH47974)
XX SQ Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. NO. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1416 TCGAAATCGGATCTC 1430
Db 1 TCTAAATCGGATCTC 15

RESULT 2308
AAC92776/c
ID AAC92776 standard; DNA; 20 BP.
XX AC AAC92776;
XX DT 27-MAR-2001 (first entry)
XX DE Human hnRNP A1 phosphorothioate antisense oligonucleotide, SEQ ID NO:48.
XX KW Human hnRNP A1; heterogeneous nuclear ribonucleoprotein A1;
XX KW heterogeneous nuclear ribonucleoprotein core protein A1; p40CRS;
XX KW mRNA processing; transport; stabilisation; alternative splicing;
XX KW donor splice site selection; telomere biogenesis; oncogenesis;

```

```

KW mRNA processing; transport; stabilisation; alternative splicing;
KW donor splice site selection; telomere biogenesis; oncogenesis;
KW apoptosis-associated protein; cancer; tumour formation;
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
XX Homo sapiens.
XX US6165789-A.
XX PD 26-DEC-2000.
XX PF 27-OCT-1999; 99US-00428696.
XX PR 27-OCT-1999; 99US-00428696.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Cowsett LM;
XX PI WPI; 2001-090484/10.
XX DR
XX PT Novel antisense compound targeted to human hnRNP A1 which specifically
XX PT hybridizes with and inhibits the expression of human hnRNP A1, useful for
XX PT modulating the expression of hnRNP A1 in cells.
XX PS Claim 3; Col 41-42; 38pp; English.
XX CC Sequences AAC92738-C92817 represent antisense oligonucleotides targeted
XX CC to the heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) gene, which
XX CC inhibit its expression. The antisense oligonucleotides were designed to
XX CC target different regions of the human hnRNP A1 mRNA, and were analysed
XX CC for their effect on hnRNP A1 mRNA levels by quantitative real-time PCR.
XX CC hnRNP A1 (also known as heterogeneous nuclear ribonucleoprotein core
XX CC protein A1 and p40CRS) is thought to function in the stabilisation,
XX CC transport and processing (including alternative splicing) of newly
XX CC synthesised mRNAs. It facilitates the annealing of single-stranded
XX CC nucleic acids, modulates the binding of snRNPs to RNA intron sequences,
XX CC and shuttles continuously between the nucleus and the cytoplasm acting as
XX CC a carrier protein for mRNAs. hnRNP A1 also participates in telomere
XX CC biogenesis, with low levels of hnRNP correlating with shortened
XX CC telomeres. In addition, hnRNP A1 has also been classified as an apoptosis
XX CC -associated protein on the basis that it is specifically cleaved into
XX CC three fragments during antibody-mediated apoptosis. Due to its ability to
XX CC control splicing events, particularly donor splice site selection, hnRNP
XX CC A1 is implicated in the process of oncogenesis. The oligonucleotides of
XX CC the invention are useful for diagnosis, prevention and treatment of
XX CC conditions associated with hnRNP A1 expression, such as cancer
XX SQ Sequence 20 BP; 7 A; 8 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. NO. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 229 AGTGTGTGTGTGTGC 243
Db 16 AGTGTGTGTGTGTGC 2

RESULT 2309
AAC92806/c
ID AAC92806 standard; DNA; 20 BP.
XX AC AAC92806;
XX DT 27-MAR-2001 (first entry)
XX DE Human hnRNP A1 phosphorothioate antisense oligonucleotide, SEQ ID NO:78.
XX KW Human hnRNP A1; heterogeneous nuclear ribonucleoprotein A1;
XX KW heterogeneous nuclear ribonucleoprotein core protein A1; p40CRS;
XX KW mRNA processing; transport; stabilisation; alternative splicing;
XX KW donor splice site selection; telomere biogenesis; oncogenesis;

```

KW apoptosis-associated protein; cancer; tumour formation;  
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.  
XX  
XX  
OS Homo sapiens.  
XX  
XX US6165789-A.  
XX  
XX 26-DEC-2000.  
XX  
XX 27-OCT-1999; 99US-00428696.  
XX  
XX 27-OCT-1999; 99US-00428696.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Monia BP, Cowser LM;  
XX  
XX WPI; 2001-090484/10.  
XX  
XX Novel antisense compound targeted to human hnRNP A1 which specifically  
XX hybridizes with and inhibits the expression of human hnRNP A1, useful for  
XX modulating the expression of hnRNP A1 in cells.  
XX  
XX Example 15; Col 41-42; 38pp; English.  
XX  
XX Sequences AAC92738-C92817 represent antisense oligonucleotides targeted  
XX to the heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) gene, which  
XX inhibit its expression. The antisense oligonucleotides were designed to  
XX target different regions of the human hnRNP A1 mRNA, and were analysed  
XX for their effect on hnRNP A1 mRNA levels by quantitative real-time PCR.  
XX hnRNP A1 (also known as heterogeneous nuclear ribonucleoprotein core  
XX protein A1 and p40CRS) is thought to function in the stabilisation,  
XX transport and processing (including alternative splicing) of newly  
XX synthesised mRNAs. It facilitates the annealing of single-stranded  
XX nucleic acids, modulates the binding of snRNPs to RNA intron sequences,  
XX and shuttles continuously between the nucleus and the cytoplasm acting as  
XX a carrier protein for mRNAs. hnRNP A1 also participates in telomere  
XX biogenesis, with low levels of hnRNP correlating with shortened  
XX telomeres. In addition, hnRNP A1 has also been classified as an apoptosis  
XX associated protein on the basis that it is specifically cleaved into  
XX three fragments during antibody-mediated apoptosis. Due to its ability to  
XX control splicing events, particularly donor splice site selection, hnRNP  
XX A1 is implicated in the process of oncogenesis. The oligonucleotides of  
XX the invention are useful for diagnosis, prevention and treatment of  
XX conditions associated with hnRNP A1 expression, such as cancer  
XX  
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;  
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX QY 1115 ACATCCTGCTGGGT 1129  
XX |||||  
XX 20 AACACCTGCTGGGT 6  
XX  
XX RESULT 2310  
XX AAF62218  
XX ID AAF62218 standard; DNA; 20 BP.  
XX  
XX AC AAF62218;  
XX  
XX 21-MAY-2001 (first entry)  
XX  
XX PCR primer for factor H (AM binding protein) gene sequence.  
XX  
XX Adrenomedullin; AM; factor H; AM binding protein; heart disease; sepsis;  
XX pulmonary disease; liver cirrhosis; cancer; diabetes; inflammation;  
XX tumour; PCR primer; ss; mouse.  
XX  
XX Mus sp.  
XX

PN WO200118550-A2.  
XX  
XX 15-MAR-2001.  
XX  
XX 08-SEP-2000; 2000WO-US024722.  
XX  
XX 10-SEP-1999; 99US-0153397P.  
XX  
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX  
XX Cuttitta F, Elsasser TH, Martinez A, Pio R;  
XX  
XX WPI; 2001-235224/24.  
XX  
XX Measuring adrenomedullin (AM) level, useful for diagnosing a disease, or  
XX determining severity of a disease characterized by abnormal AM level,  
XX comprises incubating the sample with a chaotropic agent to dissociate AM  
XX and factor H.  
XX  
XX Example 14; Page 52; 89pp; English.  
XX  
XX A method for measuring adrenomedullin (AM) levels in a sample, comprises  
XX incubating the sample with a chaotropic agent to dissociate AM and  
XX factor H. After dissociation, the sample is fractionated to obtain a  
XX peptide fraction, and the AM levels in the peptide fraction are  
XX quantified. The method for measuring AM levels, particularly circulating  
XX AM levels, is useful for disease diagnosis, for determining disease  
XX severity, and for following the course of treatment of diseases  
XX characterised by altered or abnormal AM levels. These diseases include  
XX heart diseases, pulmonary diseases, liver cirrhosis, cancer, diabetes,  
XX sepsis, and inflammation. AM-binding proteins such as factor H, are  
XX useful for the diagnosing, treating or monitoring AM-related diseases,  
XX particularly those diseases associated with abnormally elevated AM  
XX levels, and for quantifying plasma AM to diagnose and/or monitor the  
XX presence or progression of diseases characterised by altered  
XX concentrations of circulating AM. Peptides derived from factor H may be  
XX used as therapeutics for the inhibition of growth and proliferation of  
XX cancer or tumour cells, including urinary bladder, urethral, renal,  
XX rectal, colon, small intestine, gastric, oesophageal, salivary gland,  
XX gallbladder, liver, breast, vaginal, endometrial, ovarian, cervical,  
XX prostate, skin, lung, and brain cancers. The present sequence represents  
XX a PCR primer specific for the murine factor H gene. The primer is used to  
XX confirm the expression of the factor H gene in murine pancreas  
XX  
XX Sequence 20 BP; 4 A; 9 C; 1 G; 6 T; 0 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;  
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX QY 1502 CTTCCATATTTGCAC 1516  
XX |||||  
XX 3 CTTCCATCTTGCAC 17  
XX  
XX RESULT 2311  
XX AAD04441  
XX ID AAD04441 standard; DNA; 20 BP.  
XX  
XX AC AAD04441;  
XX  
XX 04-JUL-2001 (first entry)  
XX  
XX Forward PCR primer used for sequencing fragment 5 of human HTR1B gene.  
XX  
XX Human; 5-hydroxytryptamine receptor 1B; HTR1B; serotonin; gene therapy;  
XX therapeutic; forensic application; migraine; neurological disorder;  
XX PCR primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO200125194-A2.  
XX  
XX

PD 12-APR-2001.  
 XX 05-OCT-2000; 2000WO-US027486.  
 XX 07-OCT-1999; 99US-0158114P.  
 XX (GENA-) GENAISSANCE PHARM INC.  
 PA Choi JY, Denton RR, Nandabalan K, Stephens JC;  
 PI WPI; 2001-290602/30.  
 XX Polynucleotide useful for therapeutic purposes, comprises nucleotide  
 PT polymorphisms in 5-hydroxytryptamine (serotonin) receptor 1B gene.  
 PT Example 1; Page 27; 47pp; English.  
 XX The patent discloses a polynucleotide comprising one or more of 3 novel  
 CC single nucleotide polymorphisms in the human 5-hydroxytryptamine  
 CC (serotonin) receptor 1B (HTR1B) gene. The polymorphic variant comprises  
 CC at least one polymorphism selected from guanine at PS1, thymine at PS2,  
 CC and adenine at PS4, or adenine at position corresponding to nucleotide  
 CC 540. The HTR1B gene is useful for therapeutic purposes. It is useful in  
 CC studying the expression and biological function HTR1B, as well as in  
 CC developing drugs targeting this protein. It is also useful in  
 CC diagnostics and forensic applications. Identification of an association  
 CC between a trait and at least one genotype or haplotype of HTR1B is useful  
 CC for developing tests and therapeutic treatments for migraine and other  
 CC neurological disorders. It is also used in gene therapy. The present DNA  
 CC sequence is a forward PCR primer which is used for sequencing fragment 5  
 CC of HTR1B gene. This primer corresponds to 1242-1261 bases of the HTR1B  
 CC gene  
 XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;  
 QY Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 DB Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1131 CACGGTCTACTCCAC 1145  
 DB 1 CACGGTCTACTCCAC 15  
 RESULT 2312  
 AAH00813/c  
 ID AAH00813 standard; DNA; 20 BP.  
 AC AAH00813;  
 XX 24-JUL-2001 (first entry)  
 DE Cryptosporidium parvum nucleotide sequence SEQ ID NO:804.  
 XX Species specific; genus specific; family specific; probe; detection;  
 KW identification; algal; archaeal; bacterial; fungal; parasitological;  
 KW microorganism; diagnosis; translation elongation factor Tu; toxin;  
 KW translation elongation factor G; RecA recombinase; resistance;  
 KW catalytic subunit of proton-translocating ATPase; antimicrobial; vaccine;  
 KW primer; ss.  
 XX Cryptosporidium parvum.  
 OS  
 XX W0200123604-A2.  
 PN 05-APR-2001.  
 PD 28-SEP-2000; 2000WO-CA001150.  
 XX 28-SEP-1999; 99CA-02283458.  
 PR 19-MAY-2000; 2000CA-02307010.  
 XX (INFE-) INFECTIO DIAGNOSTIC (IDI) INC.  
 PA

XX Bergeron MG, Boissinot M, Huletsky A, Menard C, Ouellette M;  
 PI Picard FJ, Roy FH;  
 XX WPI; 2001-245006/25.  
 DR Nucleic acid sequences are used to generate universal probes and primers  
 XX which can be used to identify and detect the presence of algal, archaeal,  
 PT bacterial, fungal and parasitological species in a test sample.  
 PT Claim 11; Page 860; 1580pp; English.  
 XX The present invention describes a method for generating a repertoire of  
 CC nucleic acids of tuf, fus, atpD and/or recA genes from which probes  
 CC and/or primers are derived. The method comprises amplifying the nucleic  
 CC acids of determined algal, archaeal, bacterial, fungal and parasitological  
 CC species with a combination of defined primer pairs. The method can be  
 CC used for producing probes and/or primers for detecting one or more  
 CC related microorganisms e.g. algae, archaea, bacteria, fungi and  
 CC parasites, for universal detection and for specific and ubiquitous  
 CC detection and identification of an algal, archaeal, bacterial, fungal and  
 CC parasitological species, genus, family and group. A nucleic acid (I) obtained  
 CC using the method of the invention can be used for the universal detection  
 CC of any bacterium, fungus or parasite in a sample and for the detection of  
 CC at least one antimicrobial agent resistance gene or at least one toxin  
 CC gene. hexA nucleic acids are used for the specific and ubiquitous  
 CC detection and for identification of Streptococcus pneumoniae. (I) can be  
 CC used to design a therapeutic agent which is effective against  
 CC microorganisms. Microbial species or genus or family or phylum or group  
 CC which can be detected include Abiotrophia adiacens, Bordetella sp.,  
 CC Corynebacterium sp., Enterobacteriaceae group, Escherichia coli.,  
 CC Mycobacteriaceae family, Pseudomonads group, Streptococcus sp., Neisseria  
 CC gonorrhoeae and Staphylococcus sp.. Using DNA based tests provides faster  
 CC results than substrate specificity tests as results can be determined in  
 CC an hour and improved accuracy is also achieved. AAH00010 to AAH002304  
 CC represent nucleotide sequences and primers/probes which are given in the  
 CC exemplification of the present invention  
 XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;  
 QY Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 DB Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1189 GCCACAGGCGCGTCCC 1203  
 DB 18 GCCACAGGCGCGTCCC 4  
 RESULT 2313  
 AAH22573/c  
 ID AAH22573 standard; DNA; 20 BP.  
 XX AAH22573;  
 AC 07-SEP-2001 (first entry)  
 DT PK-2 transgene detecting primer.  
 XX Protein kinase stress-related protein; PKSRP; stress-tolerance; CDPK;  
 KW receptor protein kinase; RPK; receptor-like kinase; protein kinase; PK-1;  
 KW calcium dependent protein kinase; SNF1 serine/threonine protein kinase;  
 KW mitogen-activated protein kinase; MAPK; RUK; PK-2; transgenic; drought;  
 KW salinity; PCR primer; ss.  
 XX Physcomitrella patens.  
 OS  
 XX W0200145492-A2.  
 PN 28-JUN-2001.  
 XX 22-DEC-2000; 2000WO-US034970.  
 PD

```
PR 22-DEC-1999; 99US-0171745P.
XX
XX (BADI ) BASF PLANT SCI GMBH.
XX
XX Costa E SilvaOD, Ishitani M, Henkes S, Van Thielien N, Chen R;
XX WPI; 2001-417952/44.
XX
XX Protein kinase stress-related protein and nucleic acid encoding the
XX proteins, for producing transgenic plants having increased tolerance to
XX environmental stress including salinity, drought and temperature.
XX
XX Example 8; Page 60; 86pp; English.
XX
XX The invention relates to protein kinase stress-related protein (PKSRP)
XX useful for increasing stress-tolerance in plants, obtained from
XX Physcomitrella patens. The PKSRP protein is selected from receptor
XX protein kinases (RPK), receptor-like kinases (RLK), calcium dependent
XX protein kinases (CDPK), SNF1 serine/threonine protein kinases, mitogen-
XX activated protein kinases (WAPK), intermediate upstream mitogen-activated
XX protein kinases (MAPKK) and upstream mitogen-activated protein kinases
XX (WAPKK). PKSRP is preferably protein kinase-1 (PK-1), PK-2 or mitogen-
XX activated protein kinase-1 (WAPK-1). PKSRP coding nucleic acid is useful
XX for producing transgenic plants, such as maize, wheat, rye, oat, rice,
XX triticale, barley, soybean, peanut, cotton, rape seed, canola, manihot,
XX pepper, sunflower, tegetes, solanaceous plants, potato, tobacco, tomato,
XX eggplant, Vicia species, pea, alfalfa, cacao, coffee, tea, Salix species,
XX oil palm, coconut, perennial grass and forage crops with increased
XX tolerance to environmental stress, including drought, salinity or
XX temperature, as compared to a wild type variety of the plant. Sequences
XX AAH22573-75 represent primers for PK-2 transgene in transgenic
XX Arabidopsis lines
XX
XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 574 CGTGTGAGCTATCT 588
Db 19 CGTGTGAGCTATCT 5
RESULT 2314
AAH24592/C
ID AAH24592 standard; DNA; 20 BP.
XX
XX AAH24592;
AC
XX
XX 07-AUG-2001 (first entry)
DT
XX
XX Human endometrium cDNA clone 3-9-SP6 PCR primer #2.
DE
XX
XX Human; endometrium; gynaecological; cytostatic; gene therapy;
KW peptide therapy; endometriosis; gene expression; drug screening;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX W0200132920-A2.
PN
XX
XX 10-MAY-2001.
FD
XX
XX 03-NOV-2000; 2000WO-GH004228.
XX
XX 03-NOV-1999; 99GB-00026074.
PR
XX 03-NOV-1999; 99GB-00026076.
PR
XX 03-NOV-1999; 99GB-00026079.
PR
XX 03-NOV-1999; 99GB-00026081.
PR
XX (METR-) METRIS THERAPEUTICS LTD.
PA
XX
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PI Pappa H, Inenicek M;
XX
XX WPI; 2001-328804/34.
XX
XX Screening for a gene or gene product associated with endometriosis, for
XX diagnosing or treating endometriosis, comprises selecting a gene whose
XX level of expression differs between healthy and diseased endometrium
XX tissues.
XX
XX Example; Fig 3; 106pp; English.
XX
XX The invention relates to a method for screening for a gene or gene
XX product associated with endometriosis. The method comprises comparing the
XX pattern of gene expression in a diseased endometrium tissue from a
XX patient suffering from endometriosis to the pattern of gene expression in
XX healthy endometrium tissue from the same patient, and selecting a gene
XX whose level of expression differs between healthy and diseased tissues.
XX The gene, gene product and their antagonists and agonists are useful in
XX the manufacture of a medicament for diagnosing or treating endometriosis.
XX The method is useful for screening genes or gene products that are
XX implicated in endometriosis. It is particularly useful in diagnosing
XX endometriosis, as well as for screening for agents for treating
XX endometriosis. Prior methods of diagnosing endometriosis are more
XX difficult to perform and are more expensive, normally involving surgery.
XX The present method allows the disease to be diagnosed and treated at
XX earlier stage. The present sequence is a primer used in a reverse
XX transcription polymerase chain reaction (RT-PCR) procedure to validate
XX the results of differential gene expression studies. It was used to
XX amplify human endometrium cDNA encoding cathepsin D
XX
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 458 AGGACATCAACAGC 472
Db 16 AGGACATCAACAGC 2
RESULT 2315
AAD11810/C
ID AAD11810 standard; DNA; 20 BP.
XX
XX AAD11810;
AC
XX
XX 25-SEP-2001 (first entry)
DT
XX
XX Salmonella typhimurium DNA amplifying PCR primer MDH31.
DE
XX
XX MDH31; MDH2; malic acid dehydrogenase; Krebs cycle; PCR primer; ss.
KW
XX
XX Salmonella typhimurium.
OS
XX
XX US6251607-B1.
PN
XX
XX 26-JUN-2001.
PD
XX
XX 09-DEC-1999; 99US-00457474.
PF
XX
XX 09-DEC-1999; 99US-00457474.
PR
XX
XX (NASC-) NAT SCI COUNCIL.
PA
XX
XX Tsien H, Lin J;
PI
XX
XX WPI; 2001-431963/46.
XX
XX New PCR primer composition comprising primers MD31 and MDH2 that
XX specifically amplifies a DNA of Salmonella typhimurium, useful for
XX detecting the presence of S. typhimurium in a sample.
XX
XX
```

```

PS Claim 1; Col 3; 15pp; English.
XX
CC The present invention relates to a PCR primer composition that
CC specifically amplifies a 261 base pair DNA of Salmonella typhimurium. The
CC composition comprises compounds MDH31 and MDH2. The primer composition is
CC useful for detecting the presence of S. typhimurium in a sample. The
CC present sequence is PCR primer MDH31 designed based on a gene encoding
CC malic acid dehydrogenase (MDH) which is essentially involved in krebs
CC cycle and a specific DNA of S. typhimurium
XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1237 CACTTCATCTCCGT 1251
DB 20 CACTTCATCTCCGT 6
RESULT 2316
AAC83279
ID AAC83279 standard; DNA; 20 BP.
XX
AC AAC83279;
XX
DT 16-MAR-2001 (first entry)
DE PCR primer used specific for DNA encoding E. coli H antigens SEQ ID 19.
KW Escherichia coli; H antigen; antibody; H4; PCR primer; ss.
XX
OS Escherichia coli.
PN JP2000279176-A.
XX
PD 10-OCT-2000.
PF 31-MAR-1999; 99JP-00092890.
XX
PR 31-MAR-1999; 99JP-00092890.
XX
PA (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.
XX
DR WPI; 2001-027455/04.
XX
PT Preparation of an Escherichia coli H antigen.
PS Example 2; Page 35; 36pp; Japanese.
XX
CC This invention relates to gene sequences AAC83269 - AAC83276 which encode
CC Escherichia coli H antigens. Also included in the invention is a method
CC for the preparation of an E. coli H antigen, in which a gene encoding the
CC antigen is introduced to a host E. coli, expressed and recovered. The H
CC antigen is useful for the preparation of an antibody against a specific H
CC antigen. The present sequence represents a PCR primer used in the
CC isolation of DNA encoding the H antigens of the invention
XX
SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1564 ATGCTGACTCAGGC 1578
DB 6 AGGCTGACTCAGGC 20
RESULT 2317
AAH48612/c
ID AAH48612 standard; DNA; 20 BP.

```

```

XX
AC AAH48612;
XX
DT 20-SEP-2001 (first entry)
DE Human fascin associated primer SEQ ID 64.
XX
KW Fascin; regulatory sequence; human; dendritic cell; antiviral; tumor;
KW antibacterial; antifungal; antiparasitic; anti-allergic; neurological;
KW immunomodulatory; apoptotic; expression regulator; vaccine; allergen;
KW Creutzfeld-Jakob disease; Alzheimer's disease; gene therapy;
KW autoimmune disease; transplant rejection; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200151631-A2.
XX
PD 19-JUL-2001.
XX
PF 12-JAN-2001; 2001WO-EP000362.
XX
PR 13-JAN-2000; 2000DE-01001169.
PR 02-MAR-2000; 2000DE-01010188.
XX
PA (RESK/) RESKE-KUNZ A.
PA (ROSS/) ROSS X.
PA (ROSS/) ROSS R.
PA (BROS/) BROS M.
XX
PI Reske-Kunz A, Ross X, Ross R, Bros M;
XX
WPI; 2001-451858/48.
XX
PT New regulatory sequences from the fascin gene, useful for providing
PT dendritic cell-specific expression of e.g. antigens, e.g. for vaccination
PT against tumors and infections.
XX
PS Claim 2b; Page 110; 117pp; German.
XX
CC This invention describes novel regulatory sequences (A) derived from
CC human fascin that provide specific expression in dendritic cells (DC) and
CC which have antiviral, antibacterial, antifungal, antiparasitic, anti-
CC allergic, neurological, immunomodulatory and apoptotic activity. (A) are
CC used to regulate expression of antigens, immunoregulators, antisense
CC sequences etc. in DC-specific fashion. Recombinant DNA, vectors and host
CC cells that contain (A) are useful: (i) in vaccines against viruses,
CC bacteria, fungi, parasites, tumors, allergens and plaques in Creutzfeld-
CC Jakob and Alzheimer's disease; and (ii) for gene therapy of tumors,
CC allergies, infections, autoimmune diseases and transplant rejection. They
CC can also be provide specific expression of antigens and immunoregulators
CC in DC; for isolation and identification of cell factors and cis-elements
CC from regulatory sequences that mediate DC-specific expression; to
CC determine the degree of maturity of DC and to block transcription
CC factors, by providing binding sites in DC. (A) provide DC-specific
CC expression of nucleic acid under their control, allowing a more specific
CC regulation of the immune response and eliminating the long and laborious
CC purification of DC (since a complete leucocyte population may be
CC transformed), including transformation in vitro. This sequence represents
CC a primer associated with the human fascin gene described in the invention
XX
SQ Sequence 20 BP; 6 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1200 TCCCTCTTTCGGG 1214
DB 19 TCCCTCTTTCGGG 5
RESULT 2318
AAC86079/c

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CC also serve as markers for specific regions of the genome and to generate  
 CC algae, ciliates, plants, fungi or other microorganisms expressing mutated  
 CC TFSP nucleic acid and protein molecules such that the stress tolerance  
 CC is improved

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 574 CGTGTACGCTATCT 588  
 Db 19 CGTGTACGCTATCT 5

RESULT 2320  
 AAC89125/C  
 ID AAC89125 standard; DNA; 20 BP.

XX AC AAC89125;  
 DT 07-MAR-2001 (first entry)  
 DE Canine retroviral PCR primer MLVRT3250-.

XX PCR primer; immunosuppressive; cytostatic; gene therapy; retrovirus;  
 KW canine; autoimmune disease; haematopoietic malignancy; malignant tumour;  
 KW ss.

XX Unidentified.  
 OS WO200070024-A2.

XX 23-NOV-2000.

XX 17-MAY-2000; 2000WO-EP004467.

XX 17-MAY-1999; 99EP-00401192.

XX 18-MAY-1999; 99EP-00401199.

XX (FRSA-) ETAB FR DU SANG.

XX Rigal D, Ghernati I, Corbine A, Darlix J;

XX WPI; 2001-016224/02.

XX New infectious retrovirus isolated from a canine cell line, useful for  
 PT producing medicaments to treat autoimmune diseases, hematopoietic  
 PT malignancies or malignant tumors and in diagnosis and gene therapy.

XX Claim 31; Fig 11; 131pp; English.

XX The present invention relates to a retrovirus of type C morphology, which  
 CC sediments in a sucrose gradient at a density of 1.16-1.18 g/l. The  
 CC retrovirus is infectious for canine cells and belongs to the oncovirinae  
 CC group. The present sequence is a PCR primer for the retrovirus of the  
 CC present invention. The retrovirus can be included in pharmaceutical  
 CC compositions or medicaments to treat autoimmune diseases, hematopoietic  
 CC malignancies or malignant tumors, especially in humans. The retrovirus  
 CC can also be used in gene therapy to introduce a transgene into an animal,  
 CC especially a human

SQ Sequence 20 BP; 3 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1357 GCACCCGACTTGAT 1371  
 Db 17 GCACCCGACTTGAT 3

RESULT 2321  
 AAF91350  
 ID AAF91350 standard; DNA; 20 BP.

XX AC AAF91350;

XX 04-MAY-2001 (first entry)

XX Human E2F transcription factor 1 antisense oligonucleotide #56.

XX Antisense; E2F transcription factor 1; human; infection; inflammation;  
 KW tumour; ss.

XX Homo sapiens.

XX US6187587-B1.

XX 13-FEB-2001.

XX 02-MAR-2000; 2000US-00517584.

XX 02-MAR-2000; 2000US-00517584.

XX (ISIS-) ISIS PHARM INC.

XX Popoff I, Brown-Driver VL, Cowseert LM;

XX WPI; 2001-190981/19.

XX Antisense compound capable of inhibiting the expression of E2F  
 PT transcription factor 1, useful for preventing or delaying infection,  
 PT inflammation or tumor formation.

XX Example 15; Col 43; 40pp; English.

XX The present invention relates to antisense compounds up to 30 nucleobases  
 CC in length targeted to a E2F transcription factor 1. The invention is  
 CC useful for inhibiting the expression of E2F transcription factor 1 in  
 CC cells or tissues. The antisense oligonucleotides may also be used as a  
 CC research agent and to prevent infection, inflammation or tumours

SQ Sequence 20 BP; 2 A; 2 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1161 GGGTGTGGGTGCAT 1175

Db 5 GGGTGTGGGTGCAT 19

RESULT 2322  
 AAH03059/C

ID AAH03059 standard; DNA; 20 BP.

XX AC AAH03059;

XX 15-JUN-2001 (first entry)

XX Microorganism detection method related oligonucleotide SEQ ID NO: 83.

XX Microorganism identification; pathogen; DNA sequencing; HLA type;  
 KW bi-directional sequencing; infection; mutation detection; PCR primer; ss.

XX Unidentified.

XX US6214555-B1.

XX 10-APR-2001.

XX 13-MAY-1999; 99US-00311260.

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XX 01-MAY-1996; 96US-00640672.
PR 19-JUL-1996; 96US-00684498.
PR 27-FEB-1997; 97US-00807138.
PR 20-JAN-1998; 98US-00009483.
XX
XX (VISI-) VISIBLE GENETICS INC.
XX
XX Leushner J, Hui M, Dunn JM, Lacroix J;
XX
XX WPI; 2001-289718/30.
XX
XX Composition for detecting microorganisms, comprising deoxynucleotide
XX triphosphates, dideoxynucleotide triphosphate, and thermostable
XX polymerase to incorporate dideoxynucleotide triphosphate into extending
XX polymer.
XX
XX Disclosure; Col 63; 62pp; English.
XX
XX The present invention provides a composition containing 4 dNTPs and at
XX least one ddNTP and a thermally stable polymerase which incorporates
XX ddNTPs into an extending nucleic acid polymer at a rate of not less than
XX 0.4 times the rate of dNTP incorporation. This can be used with the PCR
XX primers provided in the invention to detect the presence of
XX microorganisms, such as Chlamydia trachomatis, HIV or human
XX papillomavirus, in a sample. In addition, it can be used to detect
XX mutations in a specific gene, to determine HLA type, and to produce
XX sequencing fragments for further study
XX
XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
OY 1278 GTGGCCAGGCATCCT 1292
DB 16 GTGTCCAGGCATCCT 2
XX
RESULT 2323
AAH26635
ID AAH26635 standard; DNA; 20 BP.
XX
XX AAH26635;
AC
XX
XX 26-NOV-2001 (first entry)
DT
XX
XX Human MADH6 mRNA antisense oligonucleotide ISIS 101931/101971.
DE
XX
XX MADH6; SMAD; transcription factor; human; antisense; inhibition;
XX antitumour; antiinflammatory; therapy; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
PH modified_base 1..20
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "phosphorothioate linkages"
FT modified_base 1..5
FT /*tag= b
FT /*mod_base= OTHER
FT /*note= "in the chimeric oligonucleotide, nucleotides 1-5
FT are replaced by 2'-methoxyethyl nucleotides"
FT modified_base 8
FT /*tag= d
FT /*mod_base= m5c
FT modified_base 9
FT /*tag= e
FT /*mod_base= m5c
FT modified_base 11
FT /*tag= f
FT

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FT modified_base 14
FT /*tag= g
FT /*mod_base= m5c
FT modified_base 16..20
FT /*tag= c
FT /*mod_base= OTHER
FT /*note= "in the chimeric oligonucleotide, nucleotides 16-
FT 20 are replaced by 2'-methoxyethyl nucleotides"
FT modified_base 18
FT /*tag= h
FT /*mod_base= m5c
FT modified_base 20
FT /*tag= i
FT /*mod_base= m5c
XX
XX US6277636-B1.
XX
XX 21-AUG-2001.
XX
XX 14-SEP-2000; 2000US-00662249.
XX
XX 14-SEP-2000; 2000US-00662249.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowser LM;
XX
XX WPI; 2001-588921/66.
XX
XX New antisense compounds capable of modulating expression of human Mad
XX gene family MADH6, useful for diagnosis, prophylaxis, treatment of
XX diseases associated with MADH6 expression, e.g. inflammation, infections
XX and tumors.
XX
XX Claim 1; Col 43; 34pp; English.
XX
XX The present sequence is that of phosphorothioate oligonucleotide ISIS
XX 101931, an antisense oligonucleotide targeted to nucleotides 37-56
XX (flanking the ATG start codon) of the human MADH6 mRNA sequence given in
XX AAH26681. A related chimeric oligonucleotide (ISIS 101971) has a 'gap'
XX region of 10 2'-deoxynucleotides, flanked on both sides (5' and 3',
XX directions) by 5-nucleotide 'wings' composed of 2'-methoxyethyl (2'-MOE)
XX nucleotides. The effects of these oligonucleotides on human MADH6 mRNA
XX levels were determined by quantitative real-time PCR. Inhibition was 58%
XX with the original oligonucleotide and 72% with the chimeric
XX oligonucleotide. MADH6 (also known as MADH9 and SMAD9) is a putative
XX member of a subgroup of SMAD family transcription factors which are
XX regulated by bone morphogenetic proteins, and may be involved in signal
XX transduction, growth inhibition and tumour suppression. Claimed antisense
XX oligonucleotides are used to inhibit expression of MADH6 in cells or
XX tissues (claimed), as a means of treating an animal, particularly a
XX human, having or being prone to a disease or condition associated with
XX MADH6 expression, e.g. to prevent, delay or treat infection, inflammation
XX or tumour formation
XX
XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
OY 1625 GAGGCCCGCAGCAGGC 1639
DB 4 GAGGCCACAGCAGGC 18
XX
RESULT 2324
AAH26636
ID AAH26636 standard; DNA; 20 BP.
XX
XX AAH26636;
AC
XX

```



DT 26-NOV-2001 (first entry)

DE Human MADH6 mRNA antisense oligonucleotide ISIS 101932/101972.

XX MADH6; SMAD; transcription factor; human; antisense; inhibition;

KW antitumour; antiinflammatory; therapy; ss.

XX Synthetic.

XX Key

PH Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER

FT /note= "phosphorothioate linkages"

FT modified\_base 1..5

FT /tag= b

FT /mod\_base= OTHER

FT /note= "in the chimeric oligonucleotide, nucleotides 1-5

FT are replaced by 2'-methoxyethyl nucleotides"

FT modified\_base 1

FT /tag= d

FT /mod\_base= m5c

FT modified\_base 10

FT /tag= e

FT /mod\_base= m5c

FT modified\_base 11

FT /tag= f

FT /mod\_base= m5c

FT modified\_base 13

FT /tag= g

FT /mod\_base= m5c

FT modified\_base 16..20

FT /tag= c

FT /mod\_base= OTHER

FT /note= "in the chimeric oligonucleotide, nucleotides 16-

FT 20 are replaced by 2'-methoxyethyl nucleotides"

FT modified\_base 16

FT /tag= h

FT /mod\_base= m5c

FT modified\_base 20

FT /tag= i

FT /mod\_base= m5c

XX US6277636-B1.

XX 21-AUG-2001.

XX 14-SEP-2000; 2000US-00662249.

XX 14-SEP-2000; 2000US-00662249.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Cowser LM;

XX WPI; 2001-588921/66.

XX New antisense compounds capable of modulating expression of human Mad

XX gene family MADH6, useful for diagnosis, prophylaxis, treatment of

XX diseases associated with MADH6 expression, e.g. inflammation, infections

XX and tumors.

XX Claim 1; Col 43; 34pp; English.

XX The present sequence is that of phosphorothioate oligonucleotide ISIS

XX 101932, an antisense oligonucleotide targeted to nucleotides 39-58

XX (including the ARG start codon) of the human MADH6 mRNA sequence given in

XX AAH26681. A related chimeric oligonucleotide (ISIS 101972) has a 'gap'

XX region of 10 2'-deoxynucleotides, flanked on both sides (5' and 3'

XX directions) by 5-nucleotide 'wings' composed of 2'-methoxyethyl (2'-MOE)

XX nucleotides. The effects of these oligonucleotides on human MADH6 mRNA

XX levels were determined by quantitative real-time PCR. Inhibition was 59%

XX with the original oligonucleotide and 87% with the chimeric

CC oligonucleotide, MADH6 (also known at MADH9 and SMAD9) is a putative

CC member of a subgroup of SMAD family transcription factors which are

CC regulated by bone morphogenetic proteins, and may be involved in signal

CC transduction, growth inhibition and tumour suppression. Claimed antisense

CC oligonucleotides are used to inhibit expression of MADH6 in cells or

CC tissues (claimed), as a means of treating an animal, particularly a

CC human, having or being prone to a disease or condition associated with

CC MADH6 expression, e.g. to prevent, delay or treat infection, inflammation

CC or tumour formation

XX Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

SQ

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1625 GAGGCCCGCCAGCAGGC 1639

||||| |||||||

Db 6 GAGGCCCGCCAGCAGGC 20

RESULT 2325

AAH42529/c

ID AAH42529 standard; DNA; 20 BP.

XX AC

XX AAH42529;

XX DT 01-OCT-2001 (first entry)

XX PCR primer used to amplify pyrophosphatase-1 (PPase-1) cDNA.

XX DE

XX Pyrophosphatase stress-related protein; PPSRP; pyrophosphatase-1;

XX KW PPase-1; stress-tolerance; transgenic plant; environmental stress;

XX KW drought; salinity; PCR primer; ss.

XX OS

XX Physcomitrella patens.

XX PN WO200145494-A2.

XX PD 28-JUN-2001.

XX PF 22-DEC-2000; 2000WO-US035100.

XX PR 22-DEC-1999; 99US-0171745P.

XX PA (BADI ) BASF PLANT SCI GMBH.

XX PI Henkes S, Chen R, Van Thiel N, Da Costa E SilvaO;

XX WPI; 2001-475787/51.

XX Novel pyrophosphatase stress-related protein and nucleic acids for

XX conferring increased drought, cold and/or salt tolerance to plants.

XX Example 8; Page 52; 73pp; English.

XX PCR primers AAH42529-30 were used to amplify cDNA encoding a plant

XX pyrophosphatase stress-related protein (PPSRP) in transgenic plants.

XX PPSRP is a pyrophosphatase-1 (PPase-1). PPSRP is useful for increasing

XX stress-tolerance in plants, and is obtained from Physcomitrella patens.

XX PPSRP coding nucleic acid is useful for producing a transgenic plants

XX with increased tolerance to environmental stress, including drought,

XX salinity or temperature, as compared to a wild type variety of the plant.

XX PPSRP nucleic acid molecules, proteins, vectors and host cells are useful

XX for identification and mapping of genomes of P. patens and related

XX organisms, identification and localization of P. patens sequences of

XX interest, evolutionary and protein structural studies, determination of

XX PPSRP regions required for function, modulation of a PPSRP activity,

XX metabolism of one or more cell functions, transmembrane transport of one

XX or more compounds and stress resistance

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 574 CQTGTCAGCCTATCT 588  
 | | | | | | | | | |  
 Db 19 CQTGTCAGCCTATCT 5

RESULT 2326  
 AAD41542  
 ID AAD41542 standard; DNA; 20 BP.  
 XX  
 AC AAD41542;  
 XX  
 DT 30-OCT-2002 (first entry)  
 XX  
 DE Cystatin M gene specific reverse RT-PCR primer.  
 XX  
 KW Marker; vitamin D analogue; antiproliferative; cancer; osteodystrophy;  
 KW multiple sclerosis; osteoporosis; osteomalacia; hyperparathyroidism;  
 KW genoprotective; epidermal wound; chemoprotective; DNA repair mechanism;  
 KW cytostatic; psoriasis; neuroprotective; vulnery; RT-PCR; primer; ss.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200244403-A2.  
 XX  
 PD 06-JUN-2002.  
 XX  
 PF 28-NOV-2001; 2001WO-CA001689.  
 XX  
 PR 29-NOV-2000; 2000US-0253746P.  
 PR 02-MAY-2001; 2001US-0287729P.  
 XX  
 PA (UYMC-) UNIV MCGILL.  
 PI White JH;  
 XX  
 DR WPI; 2002-537458/57.  
 XX  
 PT Novel marker for testing analogs of vitamin D expected to be effective in  
 PT reducing aberrant activity of vitamin D-responsive cell, comprises gene  
 PT pertinent to action of vitamin D for testing the analogs.  
 XX  
 PS Example 2; Page 48; 89pp; English.  
 XX  
 CC The invention relates to a marker for testing analogues of vitamin D  
 CC expected to be effective in reducing aberrant activity of vitamin D-  
 CC responsive cell, comprises at least one gene pertinent to the action of  
 CC vitamin D for testing the analogues and determining analogues capable of  
 CC regulating the gene, and is indicative of a chemopreventive or  
 CC chemotherapeutic agent. The invention is useful for testing analogues of  
 CC vitamin D expected to be effective in reducing aberrant activity of  
 CC vitamin D-responsive cell or for testing analogues of vitamin D suspected  
 CC to have antiproliferative activity. The invention is useful for reducing  
 CC aberrant activity of vitamin D-responsive cell, and for treating a  
 CC disorder characterised by an aberrant activity of vitamin D-responsive  
 CC cell, where the disorder is selected from cancer, psoriasis, multiple  
 CC sclerosis, osteoporosis, osteodystrophy, osteomalacia and  
 CC hyperparathyroidism. The invention is useful for identifying regulated  
 CC target genes correlated with the antiproliferative effect of vitamin D  
 CC and its analogues. The invention is useful for protecting against in vivo  
 CC DNA damage, for inducing in vivo DNA repair mechanisms in a mammal, or  
 CC for reducing or preventing DNA damage to the skin of a mammal, preferably  
 CC human. The invention is useful as a genoprotective or chemoprotective  
 CC agent. The invention is useful as a marker for the activity of DNA repair  
 CC mechanisms. The invention is useful for testing compounds susceptible of  
 CC inhibiting an enzyme which metabolises 1,25-dihydroxyvitamin D3. The  
 CC invention is useful for treating epidermal wounds. The present sequence  
 CC is cystatin M gene specific RT-PCR primer  
 XX  
 SQ Sequence 20 BP; 9 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 766 CTCAGGACCTCAAA 780  
 | | | | | | | | | |  
 Db 6 CACAGGACCTCAAA 20

RESULT 2327  
 AAD41116  
 ID AAD41116 standard; DNA; 20 BP.  
 XX  
 AC AAD41116;  
 XX  
 DT 30-OCT-2002 (first entry)  
 XX  
 DE Primer ON-DinB1-F3 used for DNA sequencing.  
 XX  
 KW Tumour necrosis-factor; TNF; promoter; autoimmune disorder; cancer;  
 KW therapy; primer; ss.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200246433-A2.  
 XX  
 PD 13-JUN-2002.  
 XX  
 PF 07-DEC-2001; 2001WO-EP014412.  
 XX  
 PR 08-DEC-2000; 2000US-0254649P.  
 XX  
 PA (SAUS/) SAUS J.  
 XX  
 PI Saus J;  
 XX  
 DR WPI; 2002-519670/55.  
 XX  
 PT Novel tumor necrosis-factor inducible promoter useful for identifying  
 PT candidate compounds for treating/preventing autoimmune disorders/cancer,  
 PT or for identifying promoters that are regulated by tumor necrosis factor.  
 XX  
 PS Example; Page 18; 95pp; English.  
 XX  
 CC The invention relates to a tumour necrosis-factor TNF inducible promoter.  
 CC The invention is useful for identifying candidate TNF inducible promoters  
 CC by aligning a test sequence consisting of a nucleic acid sequence with a  
 CC comparison sequence selected from the invention, using a gap opening  
 CC penalty of 50 and a gap extension penalty of 3 to define a test  
 CC alignment, shuffling the nucleic sequence of the test sequence at least  
 CC one hundred times, while maintaining its length and composition, to  
 CC produce a series of randomised sequences, aligning the randomised  
 CC sequences with the comparison sequence using a gap opening penalty of 50  
 CC and a gap extension penalty of 3, to produce a series of randomised  
 CC alignments, determining an average alignment quality of the randomised  
 CC alignments, where the average alignment quality of the randomised  
 CC alignments represent an alignment expected by chance, comparing the test  
 CC alignment with the average alignment quality of the randomised alignments  
 CC and identifying a test alignment with a probability value of less than  
 CC 0.05 that the alignment is obtained by chance as a candidate TNF  
 CC inducible promoter. The invention is useful for identifying candidate  
 CC compounds for treating or preventing autoimmune disorders or cancer. The  
 CC present sequence is a primer used in the exemplification of the invention  
 XX  
 SQ Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 537 CCCGATCTTTCACAA 551  
 | | | | | | | | | |

```
Db 4 CCCCAACTTGACAA 18
RESULT 2328
ABN89213
ID ABN89213 standard; DNA; 20 BP.
XX
AC ABN89213;
XX
DT 29-AUG-2002 (first entry)
XX
DE Human Talin antisense phosphorothioate oligonucleotide SEQ ID NO:26.
XX
KW Human; Talin; antimicrobial; antiinflammatory; cytostatic; inhibitor;
KW antisense gene therapy; infection; inflammation; Talin inhibitor; tumour;
KW antisense oligonucleotide; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /*mod_base= OTHER
FT /*note= "phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /*mod_base= OTHER
FT /*note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US6372492-B1.
XX
PD 16-APR-2002.
XX
PF 30-OCT-2000; 2000US-00702251.
XX
PR 30-OCT-2000; 2000US-00702251.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowse LM;
XX
DR WPI; 2002-470102/50.
XX
PT New antisense compound useful for inhibiting expression of Talin and for
PT preventing or delaying infection, inflammation or tumor formation.
XX
PS Claim 14; Col 41; 46pp; English.
XX
CC The present invention describes an antisense compound (I), 16 to 30 bases
CC in length targeted to specific base regions of a nucleic acid encoding
CC human Talin. Also described: (a) an antisense compound up to 30 bases in
CC length which inhibits the expression of human Talin; (b) a composition
CC (II) comprising (I) or (a); and (c) inhibiting the expression of human
CC Talin in human cells or tissues comprising contacting the cells or
CC tissues in vitro with (I) or (a). (I) has antimicrobial, antiinflammatory
CC and cytostatic activities, and can be used in antisense gene therapy and
CC as a Talin expression inhibitor. (I) can be used to inhibit the
CC expression of human Talin in human cells or tissues; to prevent or delay
CC infection, inflammation or tumour formation; and in diagnostics,
CC therapeutics, prophylaxis, and in research reagents and kits. The present
CC sequence represents a human Talin antisense chimeric phosphorothioate
CC oligonucleotide, having 2'-methoxyethyl (2'-MOE) wings of 5 nucleotides
CC at the 5' and 3' ends and a 10 nucleotide deoxy gap in the middle, which
CC is used in an example from the present invention
XX
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Mismatches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

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Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1537 AAGGAGCCAGCCTT 1551
Db 1 AAGGAAGCCAGCCTT 15
||||| |||||
1 AAGGAAGCCAGCCTT 15
RESULT 2329
AAL40334
ID AAL40334 standard; DNA; 20 BP.
XX
AC AAL40334;
XX
DT 19-SEP-2002 (first entry)
XX
DE Human caspase 6 antisense inhibition related oligo SEQ ID NO 53.
XX
KW Muscular; cytostatic; nootropic; neuroprotective; ophthalmological;
KW antilipaemic; osteopathic; caspase 6; Rieger's syndrome; bone metabolism;
KW ataxia telangiectasia; hyperproliferative disorder; cholesterol disorder;
KW haematopoietic disorder; cancer; neurological; Alzheimer's disease;
KW apoptotic; human; ds.
XX
OS Homo sapiens.
XX
PN WO200229066-A1.
XX
PD 11-APR-2002.
XX
PF 03-OCT-2001; 2001WO-US030871.
XX
PR 04-OCT-2000; 2000US-00679299.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Brown-Driver VL, Zhang H, Watt AT;
XX
DR WPI; 2002-471315/50.
XX
PT An antisense oligonucleotide of 8 to 50 nucleotides in length that
PT inhibits caspase 6, is useful for treating Rieger's syndrome.
XX
PS Example 15; Page 89; 141pp; English.
XX
CC The invention relates to an antisense oligonucleotide compound of 8 to 50
CC nucleotides in length that is targeted to a nucleic acid molecule
CC encoding caspase 6, where the oligonucleotide specifically hybridises
CC with and inhibits the expression of caspase 6. The oligonucleotide of the
CC invention specifically hybridises to and inhibits expression of caspase 6
CC in cells or tissues. The oligonucleotides can be administered
CC therapeutically or prophylactically to treat an animal having a disease
CC or condition associated with caspase 6, such as Rieger's syndrome or
CC ataxia telangiectasia, hyperproliferative disorder, a haematopoietic
CC disorder, a bone metabolism or cholesterol disorder, various types of
CC cancer, neurological conditions such as Alzheimer's disease and other de-
CC regulated apoptotic pathological conditions. This polynucleotide sequence
CC represents a human caspase 6 oligonucleotide relating to the invention.
CC NOTE: This phosphorothioate oligonucleotide sequence has 2'-MOE wings and
CC a deoxy gap
XX
SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Mismatches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1628 GCCCAGCAGCAGC 1642
Db 6 GCTCCAGCAGCAGC 20
||||| |||||
6 GCTCCAGCAGCAGC 20
RESULT 2330
AAD40926/c
```

ID AAD40926 standard; DNA; 20 BP.  
XX  
AC AAD40926;  
XX  
XX 30-OCT-2002 (first entry)  
DT  
XX Human HDAL antisense oligonucleotide ISIS #123707.  
DE  
XX Human; histone deacetylase 1; HDAL; enzyme; hyperproliferative condition;  
KW viral infection; prophylactic; inflammation; phosphorothioate backbone;  
KW tumour; antisense; cytostatic; virucide; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl residues"  
FT modified\_base 6  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 9  
FT /\*tag= e  
FT /mod\_base= m5c  
FT modified\_base 11..12  
FT /\*tag= f  
FT /mod\_base= m5c  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl residues"  
FT modified\_base 18  
FT /\*tag= g  
FT /mod\_base= m5c  
FT modified\_base 20  
FT /\*tag= h  
FT /mod\_base= m5c  
XX WO200250244-A2.  
XX  
XX 27-JUN-2002.  
XX  
XX 07-DEC-2001; 2001WO-US046518.  
XX  
XX 19-DEC-2000; 2000US-00745167.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Monia BP, Wyatt JR;  
XX  
XX WPI; 2002-519880/55.  
XX  
XX Antisense compounds targeted against polynucleotides encoding Histone  
XX deacetylase 1 useful for treating hyperproliferative conditions, e.g.  
XX cancer of hematopoietic, lymphoid, myeloid or breast, or a viral  
XX infection.  
XX  
XX Claim 3; Page 94; 120pp; English.  
XX  
XX The present invention relates to antisense compounds, compositions and  
XX methods for modulating the expression of Histone deacetylase 1 (HDAL).  
XX Sequences of the invention are useful for inhibiting the expression of  
XX HDAL in cells or tissues and for treating an animal having a disease or  
XX condition associated with HDAL e.g., hyperproliferative condition, which  
XX is cancer of haematopoietic, lymphoid, myeloid or breast or a condition  
XX resulting from a viral infection. Antisense compounds either alone or in  
XX combination with other antisense compounds or therapeutics can be used as

CC tools in differential and/or combinatorial analyses to elucidate the  
CC expression patterns of a portion or the entire complement of genes  
CC expressed within cells and tissues. They are commonly used as research  
CC reagents and diagnostics. They may also be useful prophylactically such  
CC as to prevent or delay infection, inflammation or tumour formation. The  
CC present DNA sequence is an antisense oligonucleotide targetted to human  
CC HDAL DNA  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 844 GAGTACCTGGACAAG 858  
DB 20 GAGTACCTGGACAAG 6  
RESULT 2331  
ABZ31413  
ID ABZ31413 standard; DNA; 20 BP.  
XX  
AC ABZ31413;  
XX  
DT 30-JAN-2003 (first entry)  
XX  
DE Candida albicans GRACE strain PCR primer SEQ ID NO 5632.  
XX  
KW Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;  
KW signal transduction; DNA replication; cell division; growth;  
KW proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.  
XX  
OS Candida albicans.  
XX WO200253728-A2.  
XX  
XX 11-JUL-2002.  
XX  
XX 26-DEC-2001; 2001WO-US049486.  
XX  
XX 29-DEC-2000; 2000US-0259128P.  
XX 20-FEB-2001; 2001US-00792024.  
XX 22-AUG-2001; 2001US-0314050P.  
XX  
XX (ELIT-) ELITRA PHARM INC.  
XX  
XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;  
XX WPI; 2002-566694/60.  
XX  
XX Constructing strains for identifying gene products as effective targets  
XX for therapeutic intervention, by inactivating in the strain one allele of  
XX a gene and placing other allele of the gene under conditional expression.  
XX  
XX Claim 36; SEQ ID NO 5632; 167pp + Sequence Listing; English.  
XX  
XX The invention relates to constructing (M1) a strain of diploid fungal  
XX cells in which both alleles of a gene are modified, comprising modifying  
XX one allele by insertion or replacement by a cassette having an  
XX expressible selectable marker and modifying other allele by  
XX recombination, of a promoter replacement fragment with a heterologous  
XX promoter, so that expression of the second allele is regulated by the  
XX promoter. (M1) is useful for constructing a strain of diploid fungal  
XX cells in which both alleles of a gene are modified. The diploid fungal  
XX cells having both alleles modified are useful for identifying a gene that  
XX is essential to the survival or growth of a fungus, a gene that  
XX contributes to the virulence and/or pathogenicity of a fungus, a gene  
XX that contributes to the resistance of a diploid fungus to an antifungal  
XX agent, an antifungal agent that inhibits the growth of a diploid fungus  
XX and for identifying a therapeutic agent for treatment of a mammalian  
XX disease. (M1) is useful for identifying a compound which modulates the  
XX activity of a gene product, preferably enzymatic activity, carbon

CC compound catabolism, biosynthetic, transporter, transcriptional,  
 CC translational, signal transduction, DNA replication and cell division  
 CC activity. The method is useful for identifying a compound having the  
 CC ability to inhibit growth or proliferation of C. albicans cells and for  
 CC treating infection by C. albicans. The present sequence is that of a PCR  
 CC primer used in the method of the invention. Note: The sequence data for  
 CC this patent is not represented in the printed specification but is based  
 CC on sequence information supplied to Derwent by the European Patent Office  
 XX  
 SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 656 CGGTCTACAAAGGCA 670  
 Db 3 CGGTCTACAAAGGCA 17

RESULT 2332  
 AAL48224/C  
 ID AAL48224 standard; DNA; 20 BP.

XX AAL48224;  
 AC AAL48224;  
 XX  
 DT 03-OCT-2002 (first entry)  
 DE Human IL-10 coding sequence PCR primer #1.

XX Human; autoimmune disease; systemic lupus erythematosus; SLE;  
 KW rheumatoid arthritis; Sjogren's disease; polymyositis; dermatomyositis;  
 KW histone hyperacetylating agent; immunosuppressive; dermatological;  
 KW antiinflammatory; antirheumatic; antiarthritic; PCR; primer; ss.

OS Homo sapiens.

XX WO200255017-A2.

XX 18-JUL-2002.

XX 19-NOV-2001; 2001WO-US043871.

XX 21-NOV-2000; 2000US-00718195.

XX (UYWA-) UNIV WAKE FOREST.

XX Kammer GM, Mishra N;

XX WPI; 2002-566708/60.

XX Use of a histone hyperacetylating agent in the treatment of an autoimmune disease.

XX Example 1; Page 16; 31pp; English.

XX The present invention relates to the use of histone hyperacetylating agents in the treatment of autoimmune diseases. In particular, they can be used to treat systemic lupus erythematosus (SLE), rheumatoid arthritis, Sjogren's disease, polymyositis and dermatomyositis. The present sequence is a PCR primer described in the exemplification of the invention

XX Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 38 AGGAGGAGGAGCCAG 52  
 Db 19 AGTCAGGAGGAGCCAG 5

RESULT 2333  
 ABI97181/C  
 ID ABI97181 standard; DNA; 20 BP.

XX ABI97181;  
 AC ABI97181;

XX 16-FEB-2002 (first entry)

XX Capture oligonucleotide Zip ID#4268 oligo #9.

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
 KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
 KW oncogene; tumour suppressor; human papillomavirus; forensic;  
 KW environmental monitoring; food industry; feed industry; ss.

OS Synthetic.

XX WO200179548-A2.

XX 25-OCT-2001.

XX 04-APR-2001; 2001WO-US010958.

XX 14-APR-2000; 2000US-0197271P.

XX (CORR ) CORNELL RES FOUND INC.

XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

XX WPI; 2002-034366/04.

XX Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.

XX Example 5; Fig 29; 300pp; English.

XX The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus medinensis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI92074 to ABI97546 represent oligonucleotide sequences used in the exemplification of the present invention

XX Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 669 CAAAAGCAGCTCAC 683  
 Db 19 CAAAAGCAGCGCAC 5

```
RESULT 2334
ABK49768/c
ID ABK49768 standard; DNA; 20 BP.
XX
AC ABK49768;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human atopic dermatitis related cDNA 2298-09 real time PCR primer #2.
XX
KW Atopic dermatitis; human; ss; differential display; primer; PCR;
KW eosinophil; allergic disease; anti-allergic; dermatological; TagMan;
KW 2298-09.
XX
OS Homo sapiens.
XX
FN WO200226962-A1.
XX
PD 04-APR-2002.
XX
PF 21-SEP-2001; 2001WO-JP008247.
XX
PR 26-SEP-2000; 2000JP-00293021.
XX
PA (GENO-) GENOX RES INC.
PA (NIGE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
XX
PI Sugita Y, Hashida R, Ogawa K, Fujishima T, Nagasu T, Saito H;
XX
WPI; 2002-330097/36.
DR
XX
PT Examining allergic diseases by differential display of genes showing
PT different expression particularly increase in remission stage in
PT eosinophils in patients.
XX
PS Example 1; Page 60; 74pp; Japanese.
XX
CC This invention relates to gene sequences that are differentially
CC expressed in eosinophils from patients with atopic dermatitis in the
CC increment stage as compared with those in the remission stage. These
CC sequences are used in a novel method for examining allergic diseases
CC comprising determining the expression levels of these genes and comparing
CC the expression level with that in the eosinophils of a healthy
CC individual. The method of the invention may have anti-allergic or
CC dermatological activities. The method can be used to diagnose allergic
CC diseases particularly atopic dermatitis, and may also be used to screen
CC candidate compounds for remedies. The method of the invention can be
CC performed in high throughput, at low cost. The present sequence
CC represents a real time PCR primer specific for the differentially
CC expressed atopic dermatitis related cDNA sequence 2298-09. This primer is
CC used to quantify expression of the 2298-09 gene of the invention
XX
SQ Sequence 20 BP; 3 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 407 CTCACAGTCAGATGC 421
Db 16 CTCACAGTCAGATGC 2
|||||
RESULT 2335
ABK69328
ID ABK69328 standard; DNA; 20 BP.
XX
AC ABK69328;
XX
DT 15-JUL-2002 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide #80 for caspase 9 inhibition.
XX
XX Antisense compound; caspase 9; C9; hyperproliferative disorder; stroke;
KW haematopoietic disorder; cholesterol disorder; bone metabolism disorder;
KW brain injury; neurodegenerative disease; infection; inflammation; tumour;
KW phosphorothioate backbone linkage; 2'-methoxyethyl; 2'-MOE; ss.
XX
OS Mus musculus.
OS Synthetic.
OS Chimeric.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate nucleotides, all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
WO200222641-A1.
XX
21-MAR-2002.
XX
10-SEP-2001; 2001WO-US028233.
XX
11-SEP-2000; 2000US-00659845.
XX
(ISIS-) ISIS PHARM INC.
XX
Zhang H, Watt AT;
XX
WPI; 2002-351874/38.
XX
New antisense oligonucleotide which modulates expression of caspase 9,
XX useful to treat tumor, inflammation or to prevent infection in humans.
XX
Claim 26; Page 94; 145pp; English.
XX
The present invention relates to a new antisense compound targeted to a
XX nucleic acid molecule encoding caspase 9 (C9). The compound specifically
XX hybridises with and inhibits the expression of caspase 9. The invention
XX also describes an antisense compound that specifically hybridises with an
XX 8 nucleotide portion of an active site of the nucleic acid. The invention
XX is useful for inhibiting the expression of C9 in cells or tissues and is
XX associated with C9, including an animal having a disease or condition
XX cholesterol disorder, bone metabolism disorder, stroke, brain injury or
XX neurodegenerative disease. The compound is commonly useful as a research
XX and diagnostics reagent. It is also useful to distinguish between
XX functions of various members of a biological pathway. The invention is
XX also be useful prophylactically e.g. to prevent or delay infection,
XX inflammation or tumor formation. The antisense compound of the invention
XX is often preferred over native form because of enhanced cellular uptake,
XX enhanced affinity for nucleic acid target and increased stability in
XX presence of nucleases. The present nucleic acid sequence represents one
XX of a collection (ABK69249-ABK69396) of chimeric phosphorothioate
XX oligonucleotides having 2'-methoxyethyl (2'-MOE) wings. This sequence was
XX used in the methods of the invention for inhibition of caspase 9
XX
SQ Sequence 20 BP; 3 A; 9 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 733 GCACCTGTCACCGCC 747
|||||
```

```

Db      1 GCACCTGCATCGCC 15
RESULT 2336
ABT03951
ID      ABT03951 standard; DNA; 20 BP.
XX
AC      ABT03951;
XX
DT      18-SEP-2002 (first entry)
XX
DE      Human pol kappa 76 DNA polymerase sequencing primer #57.
XX
KW      Human; pol kappa 76; Goodpasture antigen binding protein; GPBP;
KW      chromosome 5q12-13; apoptosis; autoimmune disorder; cancer; cytostatic;
KW      immunosuppressive; PCR; primer; sequencing; ss.
XX
OS      Homo sapiens.
XX
FN      WO200246378-A2.
XX
PD      13-JUN-2002.
XX
PF      07-DEC-2001; 2001WO-EP014409.
XX
PR      08-DEC-2000; 2000US-0254649P.
XX
PA      (SAUS/) SAUS J.
XX
PI      Saus J;
XX
DR      WPI; 2002-537563/57.
XX
PT      Novel isolated pol kappa76 polypeptide, a 76 kDa alternatively spliced
PT      variant of DNA polymerase kappa, useful as target for treating a patient
PT      with autoimmune disorder or cancer.
XX
PS      Example; Page 17; 90pp; English.
XX
CC      The present invention provides the protein and coding sequences of human
CC      DNA polymerase pol kappa 76. The gene is found on human chromosome 5q12-
CC      13, in a head-to-head arrangement with the Goodpasture antigen binding
CC      protein (GPBP). The detection of the coding sequence can be used for
CC      diagnosing an autoimmune condition and identifying cells undergoing
CC      apoptosis, and the sequences can be used in the treatment of autoimmune
CC      diseases and cancer. The present sequence is a sequencing primer
CC      described in the invention
XX
SQ      Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      537 CCCCATCTTTGACAA 551
          ||||| |||||
Db      4 CCCCAACTTTGACAA 18

RESULT 2337
AAD41680/c
ID      AAD41680 standard; DNA; 20 BP.
XX
AC      AAD41680;
XX
DT      30-OCT-2002 (first entry)
XX
DE      Human IL-12 p35 subunit DNA antisense oligonucleotide ISIS #138990.
XX
KW      Human; interleukin-12; IL-12 p35 subunit; therapeutic; infection; tumour;
KW      inflammation; antisense therapy; antisense; phosphorothioate backbone;
KW      prophylactic; ss.
XX

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---

```

OS      Homo sapiens.
OS      Synthetic.
XX
FH      Key
FT      modified_base
FT      1..20
FT      /mod_base= OTHER
FT      /note= "Phosphorothioate backbone"
FT      1..5
FT      /tag= b
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (MOE) residues"
FT      5
FT      /tag= d
FT      /mod_base= m5c
FT      modified_base
FT      8
FT      /tag= e
FT      /mod_base= m5c
FT      modified_base
FT      11
FT      /tag= f
FT      /mod_base= m5c
FT      modified_base
FT      16..20
FT      /tag= c
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (MOE) residues"
FT      16
FT      /tag= g
FT      /mod_base= m5c
FT      modified_base
FT      19
FT      /tag= h
FT      /mod_base= m5c
FT      modified_base
FT      19
FT      /mod_base= m5c
XX
PN      US6399379-B1.
XX
PD      04-JUN-2002.
XX
PF      07-MAY-2001; 2001US-00851520.
XX
PR      07-MAY-2001; 2001US-00851520.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Baker BP, Freier SM;
XX
DR      WPI; 2002-535980/57.
XX
PT      Novel antisense compounds targeted to nucleic acids encoding interleukin-
PT      12 p35 subunit, useful for modulating interleukin-12 p35 subunit
PT      expression and treating diseases associated with expression of the
PT      subunit in humans.
XX
PS      Claim 3; Col 47-48; 44pp; English.
XX
CC      The present invention relates to novel antisense oligonucleotides which
CC      specifically hybridise with specific regions of nucleic acids encoding
CC      interleukin-12 (IL-12) p35 subunit and inhibit the expression of human IL
CC      -12 p35 subunit. Sequences of the invention are useful for inhibiting the
CC      expression of human IL-12 p35 subunit in human cells or tissues and for
CC      treating animals, particularly humans suspected of having or being prone
CC      to diseases or conditions associated with expression of IL-12 p35
CC      subunit. They are useful for diagnostics, therapeutics and as research
CC      reagent, e.g. prophylactically to prevent or delay infection, tumour
CC      formation or inflammation. Sequences of the invention are useful for
CC      antisense therapy. The present sequence is an antisense oligonucleotide
CC      targeted to human IL-12 p35 subunit DNA. This sequence is used in the
CC      exemplification of the invention
XX
SQ      Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 337 GAGACTTGAAGATG 351  
||| ||||| |||||  
DB 19 GAAGACTTGAAGATG 5

RESULT 2338  
ADG90476  
ID ADG90476 standard; DNA; 20 BP.  
XX  
AC ADG90476;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE Human talin phosphorothioate antisense oligonucleotide, SEQ ID NO:26.  
XX  
KW Human; talin; cellular adhesion; muscle strength; cardiac function;  
KW cardiomyocyte; platelet; prostate; androgen downregulation;  
KW prostate cancer; talin-related disorder;  
KW cellular adhesion-related disorder; expression inhibition;  
KW antisense therapy; phosphorothioate; antisense oligonucleotide; ss.  
XX  
OS Homo sapiens.  
XX  
PH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base  
FT /note= "This oligonucleotide has a phosphorothioate  
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',  
FT and 3' ends, which are 5 nucleotides in length. Also all  
FT cytosine nucleotides are 5-methylcytosines"  
XX  
PN WO200268446-A1.  
XX  
PD 06-SEP-2002.  
XX  
PF 30-OCT-2001; 2001WO-US048435.  
XX  
PR 22-FEB-2001; 2001US-00791942.  
XX  
PA (ISIS-) ISIS PHARM INC.  
PA (BOEH ) BOEHRINGER INGELHEIM PHARM INC.  
XX  
PI Bennett CF, Rothlein R, Kishimoto TK, Cowseert LM;  
XX  
DR WPI; 2002-691651/74.  
XX  
XX New antisense oligonucleotides targeted to nucleic acid molecules  
PT encoding human Talin, useful for inhibiting the expression of human Talin  
PT and for treating a human having a disease or condition associated with  
PT Talin.  
XX  
XX Example 15; SEQ ID NO 26; 114pp; English.  
XX  
CC Sequences ADG90460-ADG90539 represent phosphorothioate targeted to the  
CC human talin gene, which inhibit its expression. The antisense were  
CC designed to target different regions of human talin RNA, and were  
CC analysed for their effect on talin expression by quantitative real-time  
CC PCR. Talin is a cytoplasmic protein which links cytoskeletal proteins  
CC such as actin, myosin and vinculin to integrins, thereby linking the  
CC extracellular matrix to other cells. It is thought to be involved in the  
CC regulation of cellular adhesion and cell morphology. Talin is highly  
CC expressed in platelets, and may play a role in platelet adhesion as its  
CC subcellular distribution differs between resting non-adhesive platelets  
CC and activated adhesive platelets. It could also play a major role in  
CC determining muscle strength and cardiac function as it has been found to  
CC participate in the transmission of contractile force to the extracellular  
CC matrix in cardiomyocytes, and exhibits mechanical loading-dependent  
CC expression at myotendinous junctions. The expression of talin is  
CC downregulated by androgens in prostate tissues, a phenomenon known to  
CC contribute to the development of prostate cancer. The oligonucleotides of  
CC the invention are useful for diagnosis, prevention and treatment of talin  
CC related disorders, such as those related to cellular adhesion. The

CC present sequence represents a human c-Ha-ras phosphorothioate antisense  
CC oligonucleotide used as a positive control in determining optimal  
CC oligonucleotide concentration for a particular cell line.  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. NO. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1537 AAGGAGGCGAGCCTT 1551  
||||| ||||| |||||  
DB 1 AAGGAGGCGAGCCTT 15

RESULT 2339  
ACA97213  
ID ACA97213 standard; DNA; 20 BP.  
XX  
AC ACA97213;  
XX  
DT 11-AUG-2003 (first entry)  
XX  
DE Vpr-driven construct associated primer #46.  
XX  
KW PCR; primer; Vpr; ss; immune response; immunocompromise; HIV; cancer;  
KW gene therapy.  
XX  
OS Unidentified.  
XX  
PN US2003017137-A1.  
XX  
PD 23-JAN-2003.  
XX  
PF 22-JUL-1998; 98US-00120286.  
XX  
PR 22-JUL-1998; 98US-00120286.  
XX  
PA (ALFI/) ALFIERI C.  
PA (TANN/) TANNER J.  
PA (ROUX/) ROUX P.  
XX  
PI Alfieri C, Tanner J, Roux P;  
XX  
DR WPI; 2003-438926/41.  
XX  
XX Novel DNA or RNA construct for increasing immune response of warm-blooded  
PT animal, has vpr activated promoter, DNA segment encoding interleukin 2  
PT and secretory DNA encoding signal peptide functional in mammary cells.  
XX  
XX Disclosure; Page 16; 28pp; English.  
XX  
CC The invention relates to a DNA or RNA construct capable of expressing  
CC interleukin (IL)-2 in a warm-blooded animal or biological preparation,  
CC comprising a vpr activated promoter, a transcribable DNA segment coding  
CC for IL-2 and a secretory DNA encoding for a signal peptide functional in  
CC mammary cells and operably linked between the promoter and the DNA  
CC segment to facilitate secretion of IL-2. The construct is useful for  
CC increasing the immune response of a warm-blooded animal or biological  
CC preparation, by introducing the construct in stem cells, antigen  
CC presenting cells or immune cell leukocytes, fibroblasts and epithelial  
CC cells, of the warm-blooded animal or biological preparation to obtain a  
CC transfected cell populations and administering a pharmaceutically  
CC effective amount of the transfected cell populations to the warm-blooded  
CC animal or biological preparation. The warm-blooded animal is an  
CC immunocompromised patient. The method is useful for stimulating immune  
CC response in immunocompromised patients affected with HIV, cancer and  
CC other immunocompromised patients. The present sequence represents a vpr-  
CC driven construct associated primer. Note: The present sequence is  
CC displayed in the sequence listing but no further reference is made to it  
CC in the specification  
XX  
XX Sequence 20 BP; 9 A; 6 C; 4 G; 1 T; 0 U; 0 Other;  
SQ



Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 766 CTCAGGACCTCAAA 780  
| | | | | | | | | |  
DB 6 CACAAGGACCTCAAA 20

RESULT 2340  
ABT34199/c  
ID ABT34199 standard; DNA; 20 BP.  
AC ABT34199;  
XX  
DT 12-JUN-2003 (first entry)  
XX  
DE Mouse short heterodimer partner-1 expression oligo SEQ ID NO 74.  
XX  
KW Antiarteriosclerotic; cardiant; vasotropic; antiinfective; cytostatic;  
KW antiinflammatory; inhibitor; antisense gene therapy; atherosclerosis;  
KW short heterodimer partner-1; abnormal; lipid; cholesterol metabolism;  
KW cardiovascular disease; infection; inflammation; tumour formation; mouse;  
KW antisense; ds.  
XX  
OS Unidentified.  
XX  
PN WO2003012033-A2.  
XX  
PD 13-FEB-2003.  
XX  
PF 17-JUL-2002; 2002WO-US023245.  
XX  
PR 31-JUL-2001; 2001US-00919197.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke RM, Graham MJ;  
XX  
DR WPI; 2003-248161/24.  
XX  
XX New antisense oligonucleotide targeted to a nucleic acid encoding short  
PT heterodimer partner-1, useful for treating diseases involving abnormal  
PT lipid or cholesterol metabolism, e.g atherosclerosis or cardiovascular  
PT diseases.  
XX  
PS Claim 3; Page 95; 121pp; English.  
XX  
CC The invention relates to a novel compound of 8 - 50 nucleobases in length  
CC targeted to a nucleic acid molecule encoding a short heterodimer partner-  
CC 1. The novel compound specifically hybridizes with a nucleic acid  
CC molecule encoding the short heterodimer partner-1, and inhibits the  
CC expression of the nucleic acid molecule. The compound, and a composition  
CC comprising it are useful for treating a disease or condition associated  
CC with the short heterodimer partner-1, particularly a condition involving  
CC abnormal lipid or cholesterol metabolism such as atherosclerosis or a  
CC cardiovascular disease. They are also useful in research and diagnostics  
CC for modulating the expression of short heterodimer partner-1. They can  
CC also be useful prophylactically in preventing or delaying infection,  
CC inflammation or tumour formation. This polynucleotide sequence represents  
CC a mouse antisense oligo relating to the heterodimer partner-1 of the  
XX invention  
SQ Sequence 20 BP; 4 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 169 CGAGGTGGCCGAGGC 183  
| | | | | | | | | |  
DB 19 CGAGGTGGCTGAGGC 5

RESULT 2341  
ABX78139/c  
ID ABX78139 standard; DNA; 20 BP.  
XX  
AC ABX78139;  
XX  
DT 16-APR-2003 (first entry)  
XX  
DE Murine p38-alpha MAPK antisense oligonucleotide ISIS NO 100802.  
XX  
KW p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;  
KW antisense; antiarthritic; antiinflammatory; kinase inhibitor; mouse;  
KW inflammatory disease; rheumatoid arthritis; gene therapy; ss.  
XX  
OS Mus musculus.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /mod\_base= OTHER  
FT /note= "nucleotides 1-5 & 16-20 are 2'-methoxyethoxy  
FT (MOE) nucleotides, nucleotides 1-4 & 16-19 are linked  
FT via phosphodiester linkages, nucleotides 6-15 are 2'-  
FT deoxy- nucleotides, nucleotides 5-16 are linked via  
FT phosphorothioate linkages, all C nucleotides are 5-  
FT methyl cytosines"  
XX  
PN US6448079-B1.  
XX  
PD 10-SEP-2002.  
XX  
PF 15-AUG-2000; 2000US-00640101.  
XX  
PR 06-APR-1999; 99US-00286904.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Gaarde WA, Nero P, McKay R;  
XX  
DR WPI; 2003-089122/08.  
XX  
PT New antisense compound, useful for preparing a composition for  
PT diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid  
PT arthritis.  
XX  
PS Example 5; Col 27-28; 44pp; English.  
XX  
CC This invention describes a novel antisense compound, which is 8-30  
CC nucleobases in length targeted to a nucleic acid molecule encoding p38  
CC mitogen-activated protein kinase (MAPK). The products of the invention  
CC have antiarthritic and antiinflammatory activity, can act as act as  
CC kinase inhibitors. The antisense compound is useful for preparing a  
CC composition for diagnosing, treating or preventing inflammatory diseases,  
CC e.g. rheumatoid arthritis or for use in antisense gene therapy. This  
CC sequence represents an antisense oligonucleotide used in a method to  
XX inhibit p38 MAPK  
SQ Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1638 GCAGCGGCTGAGGG 1652  
| | | | | | | | | |  
DB 15 GCAGCGGCTGAGGG 1

RESULT 2342  
ABT43349  
ID ABT43349 standard; DNA; 20 BP.

```

XX AC ABT43349;
XX DT 22-SEP-2003 (first entry)
XX DE Neuroblastoma-related DNA sequence #264.
XX KW Neuroblastoma; prognosis; ds; oligonucleotide.
XX OS Unidentified.
XX PN WO2002103017-A1.
XX PD 27-DEC-2002.
XX PF 30-MAY-2002; 2002WO-JF005295.
XX PR 31-MAY-2001; 2001JP-00163666.
XX PR 24-AUG-2001; 2001JP-00255260.
XX PA (CHIB-) CHIBA PREFECTURE.
XX PA (HISM ) HISAMITSU PHARM CO LTD.
XX PI Nakagawara A;
XX WPI; 2003-167523/16.
XX Nucleic acids isolated from neuroblastoma showing enhanced expression in
XX human neuroblastoma with good prognosis, useful in clarifying good/poor
XX prognosis of neuroblastoma and providing genetic data.
XX Example 5; Page 25; 444pp; Japanese.
XX The invention comprises DNA sequences that show enhanced expression in
XX human neuroblastoma with good prognosis. The DNA sequences of the
XX invention are useful in clarifying good/poor prognosis of neuroblastoma.
XX The present DNA sequence was used in the exemplification of the invention
XX
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
      Query Match 0.8%; Score 13.4; DB 1; Length 20;
      Best Local Similarity 93.3%; Pred. No. 1.2e+03;
      Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1299 CGAGGAGTTCAGAC 1313
   |||||
Db 6 CCAGGAGTTCAGAC 20

RESULT 2343
ABX95014/c
ID ABX95014 standard; DNA; 20 BP.
XX AC ABX95014;
XX DT 05-JUN-2003 (first entry)
XX DE Human MAGE-C2 gene amplification primer S115.
XX TRAP; ss; tumour rejection antigen precursor; cytolytic T-cell; CTL;
XX tumour; seminoma; bladder transitional-cell carcinoma; NSCLC; adaptor;
XX head-and-neck squamous-cell carcinoma; breast carcinoma; sarcoma;
XX cutaneous melanoma; non-small cell lung cancer; PCR; primer; MAGE-C2;
XX human.
XX OS Homo sapiens.
XX PN US2002176865-A1.
XX PD 28-NOV-2002.
XX PF 01-MAR-2002; 2002US-00085108.
XX PR
XX PA

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PR 25-APR-1997; 97US-00845528.
PR 24-APR-1998; 98US-00066281.
PR 17-DEC-1999; 99US-00468433.
PR 09-FEB-2000; 2000US-00501104.
XX (LUCA/) LUCAS S.
XX (BOON/) BOON-FALLEUR T.
XX Lucas S, Boon-Falleur T;
XX WPI; 2003-328468/31.
XX Novel isolated nucleic acid encoding tumor rejection antigen precursor
XX MAGE-C3, MAGE-B5, or MAGE-B6, useful as diagnostic probes to determine
XX presence of abnormal e.g., tumor cells expressing MAGE-C1, MAGE-B5 or
XX MAGE-B6.
XX Example 11; Page 12; 59pp; English.
XX The invention relates to an isolated nucleic acid molecule which encodes
XX a tumour rejection antigen precursor (TRAP) having an amino acid sequence
XX of a TRAP encoded by a fully defined MAGE-C3, MAGE-B5, or MAGE-B6
XX polynucleotide sequence. Also disclosed is a method which is useful for
XX determining presence of cytolytic T-cells specific for complexes of human
XX leukocyte antigen (HLA) and a peptide derived from the nucleic acid in a
XX cytotoxic T-lymphocyte (CTL)-containing sample. The nucleic acid is
XX useful as a diagnostic probe to determine the presence of abnormal
XX (tumour) cells such as seminoma, bladder transitional-cell carcinoma,
XX head-and-neck squamous-cell carcinoma, breast carcinoma, sarcoma,
XX cutaneous melanoma or non-small cell lung cancer (NSCLC) which express
XX MAGE-C1, MAGE-B5 or MAGE-B6. The nucleic acid is useful for diagnosing a
XX disorder characterised by expression of MAGE-C1, MAGE-B5 or MAGE-B6 TRAPs
XX or tumour rejection antigens (TRAs). The present sequence represents the
XX human MAGE-C2 gene amplification primer S115
XX
SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
      Query Match 0.8%; Score 13.4; DB 1; Length 20;
      Best Local Similarity 93.3%; Pred. No. 1.2e+03;
      Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1430 CCGCAGAGGATGCCA 1444
   |||||
Db 15 CCGCAGATGATGCCA 1

RESULT 2344
AAD52514
ID AAD52514 standard; DNA; 20 BP.
XX AC AAD52514;
XX DT 02-MAY-2003 (first entry)
XX DE Arabidopsis thaliana gene amplifying reverse PCR primer #14.
XX TRAP; ss; tumour rejection antigen precursor; cytolytic T-cell; CTL;
XX tumour; seminoma; bladder transitional-cell carcinoma; NSCLC; adaptor;
XX head-and-neck squamous-cell carcinoma; breast carcinoma; sarcoma;
XX cutaneous melanoma; non-small cell lung cancer; PCR; primer; MAGE-C2;
XX human.
XX OS Arabidopsis thaliana.
XX PN WO2002090547-A1.
XX PD 14-NOV-2002.
XX PF 07-MAY-2002; 2002WO-AU000564.
XX PR 07-MAY-2001; 2001AU-00004821.
XX PA (AGRI-) AGRIC VICTORIA SERVICES PTY LTD.

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PA (AGRE-) AGRESEARCH LTD.  
XX Spangenberg G, Sawbridge TI, Ong EK, Emmerling M;  
XX WPI; 2003-129183/12.  
XX New isolated nucleic acid encoding ASP, A22, CYS, LEA, DHN or PRABA  
PT proteins, useful as molecular genetic markers, and in modifying plant  
PT and/or seed development and responses to stresses and adverse  
PT environmental stimuli.  
XX Example 6; Page 35; 231pp; English.  
XX The invention relates to nucleic acid encoding abscisic acid-inducible  
CC and stress responsive proteins (ASR and A22), stress-inducible cysteine  
CC proteases (CYS), late embryogenesis abundant proteins (LEA), dehydrins  
CC (DHN) and abscisic acid-induced protein kinases (PRABA). The invention  
CC also relates to a method for modification of plant and seed development  
CC and plant responses to stresses and stimuli. The invention is useful as  
CC molecular genetic markers. The method is useful for modifying plant  
CC response to an environmental stimulus, modifying plant tolerance to  
CC abiotic, osmotic and/or temperature stresses, modifying seed dormancy  
CC and/or germination, development, maturation, and modifying a plant  
CC developmental process. They are also useful for modifying plant tolerance  
CC and adaptation to stresses and adverse environmental stimuli. The  
CC invention is also used in gene therapy. The present sequence is a PCR  
CC primer used for amplifying Arabidopsis thaliana gene. This sequence is  
CC used in the exemplification of the invention  
XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1577 GCAGGCCAGCTTCC 1591  
Db ||||| ||||| |||||  
6 GCAGGCCAGCTTCC 20  
RESULT 2345  
ABT32516  
ID ABT32516 standard; DNA; 20 BP.  
XX AC ABT32516;  
XX 08-MAY-2003 (first entry)  
XX Neuroblastoma-related oligonucleotide #293.  
XX Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;  
XX high malignancy.  
XX Unidentified.  
XX WO200297093-A1.  
XX 05-DEC-2002.  
XX 30-MAY-2002; 2002WO-JP005294.  
XX 30-MAY-2001; 2001JP-00162775.  
XX 24-AUG-2001; 2001JP-00255226.  
XX (CHIB-) CHIBA PREFECTURE.  
PA (HISM) HISAMITSU PHARM CO LTD.  
XX Nakagawara A;  
PI WPI; 2003-140476/13.  
XX Nucleic acids having higher expression in human neuroblastoma with poor  
PT prognosis for diagnostic prediction of neuroblastoma prognosis.

XX Example 5; Page 28; 111pp; Japanese.  
XX The invention comprises nucleic acids that show increased expression in  
CC human neuroblastomas with poor prognosis over those with a good  
CC prognosis. The nucleic acids of the invention are useful as a tool for  
CC distinguishing neuroblastomas with a favourable prognosis (spontaneous  
CC regression) from neuroblastomas with a poor prognosis (high malignancy).  
CC The DNA sequences ABT32224 - ABT32571 represent oligonucleotides used in  
XX an example of the invention  
XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1299 CCAGGAGTTCAGAC 1313  
Db ||||| ||||| |||||  
6 CCAGGAGTTCAGAC 20  
RESULT 2346  
ACD23029  
ID ACD23029 standard; DNA; 20 BP.  
XX AC ACD23029;  
XX 25-AUG-2003 (first entry)  
XX Human NEMO gene intron 7 donor sequence.  
XX Human; ds; NF-kappaB essential modulator; nuclear factor kappa B;  
KW incontinentia pigmenti; X-linked disorder; chromosome Xq28; NEMO;  
KW immunomodulatory; dermatological; osteopathic; neuropathic;  
KW apoptosis-related disease; immune-system related disease;  
KW blood vessel-related disease; skin defect; dental defect; osteopetrosis;  
KW ophthalmologic defect; neurological defect.  
XX Homo sapiens.  
OS US2003032055-A1.  
XX 13-FEB-2003.  
XX 22-MAY-2001; 2001US-00863049.  
XX 22-MAY-2000; 2000US-0206223P.  
XX (KENW/) KENWICK S J.  
PA (WOFF/) WOFFENDIN H.  
PA (MUNN/) MUNNICH A.  
PA (SMAH/) SMAHI A.  
PA (ISRA/) ISRAEL A.  
PA (POUS/) POUTKA A.  
PA (HEIS/) HEISS N.  
PA (DURS/) D'URSO M.  
PA (LEWI/) LEWIS R A.  
PA (NELS/) NELSON D L.  
PA (ARAD/) ARADHYA S.  
PA (LEVY/) LEVY M.  
XX Kenrick SJ, Woffendin H, Munnich A, Smahi A, Israel A;  
PI Poustka A, Heiss N, D'urso M, Lewis RA, Nelson DL, Aradhya S;  
PI Levy M;  
XX WPI; 2003-492063/46.  
XX Detection of necrosis factor-kappa B related medical condition in  
PT organism, by obtaining sample from the organism, and analyzing the sample  
PT for alteration in specified amino acid sequences.  
XX Claim 40; Page 19; 44pp; English.  
PS

XX The invention relates to a nuclear factor-kappa B (NF-kappa B) related  
 CC medical condition in an organism being detected by obtaining a sample  
 CC from the organism, and analysing the sample for an alteration in a the  
 CC nuclear factor kappaB essential modifier (NEMO) gene or protein sequence  
 CC (neither shown in the specification). The alteration results in  
 CC inactivation of NF-kappa B. Also included are treating or preventing NF-  
 CC kappa B related medical condition in an organism by administering the  
 CC NEMO protein to the organism and screening a test organism for a compound  
 CC for the treatment of NF-kappa B related medical condition (by  
 CC administering the compound to the organism, and assaying for an  
 CC improvement in the NF-kappa B related medical condition). The method  
 CC useful is for detecting NF-kappa B related condition, e.g. incontinentia  
 CC pigmenti (IP), apoptosis-related disease, immune-system related disease,  
 CC blood vessel-related disease, skin defect, dental defect, osteopetrosis,  
 CC ophthalmologic defect, or neurological defect, in an organism, i.e. human  
 CC including affected individual, carrier individual, or noncarrier  
 CC individual. The NEMO gene is located on chromosome Xq28, incontinentia  
 CC pigmenti being an X-linked disorder. Experiments in this study show  
 CC variations in exon 2, 10, 9 and particularly intron 3 to be linked to  
 CC familial incontinentia pigmenti. The present sequence is an intron donor  
 CC or acceptor site from the human NEMO gene  
 XX  
 SQ Sequence 20 BP; 4 A; 6 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 70 CCACGGGGAGGGCC 84  
 ||||| ||||| |||||  
 Db 6 CCACGGTGAGGGCC 20

RESULT 2347  
 ACC99704/C  
 ID ACC99704 standard; DNA; 20 BP.  
 XX  
 AC ACC99704;  
 XX  
 DT 02-SRP-2003 (first entry)  
 XX  
 DE Cyclin D1 PCR primer SEQ ID NO:85.  
 XX  
 KW Multiplex real-time quantitative PCR; PCR primer; copy number;  
 KW Alzheimer's disease; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2003048377-A2.  
 XX  
 PD 12-JUN-2003.  
 XX  
 PF 02-DEC-2002; 2002WO-US038806.  
 XX  
 PR 30-NOV-2001; 2001US-0336095P.  
 PR 19-JUL-2002; 2002US-0397475P.  
 XX  
 PA (UYRP ) UNIV ROCHESTER.  
 PA (THER/) THERIANOS S.  
 XX  
 PI Zhu M, Coleman P;  
 XX  
 DR WPI; 2003-532841/50.  
 XX  
 PT Determining the relative copy number of a group of target nucleic acid  
 PT molecules present in a sample by performing a first or second PCR in a  
 PT PCR mixture and quantifying the number of copies of the second target  
 PT nucleic acid product.  
 XX  
 PS Disclosure; Fig 6; 118pp; English.  
 XX  
 CC The present invention describes a multiplex real-time quantitative PCR

CC method for determining the relative copy number of a group of target  
 CC nucleic acid molecules present in a sample. The method comprises: (1)  
 CC performing a first PCR in a PCR mixture; (2) performing a second PCR in a  
 CC PCR mixture; and (3) quantifying the number of copies of the second  
 CC target nucleic acid product present in the sample containing the target  
 CC nucleic acid molecule. Also described: (1) quantifying the copy number of  
 CC a group of target nucleic acids in a sample; and (2) determining whether  
 CC a subject is at risk of acquiring Alzheimer's disease. The method is  
 CC useful for determining the relative copy number of a group of target  
 CC nucleic acid molecules present in a sample for determining whether a  
 CC subject is at risk of acquiring Alzheimer's disease. ACC99620 to ACC99730  
 CC represent PCR primer used in the exemplification of the present invention  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 275 CTGCTCCTGGGAAC 289  
 ||||| ||||| |||||  
 Db 20 CTGCTCCTGGTGAAC 6

RESULT 2348  
 ADA27483/C  
 ID ADA27483 standard; DNA; 20 BP.  
 XX  
 AC ADA27483;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Microorganism sequencing primer #83.  
 XX  
 KW microorganism detection; bi-directional DNA sequencing;  
 KW HLA determination; human leukocyte antigen; reduced error risk;  
 KW reduced contamination risk; sequencing; primer; ss.  
 XX  
 OS Human herpesvirus 4.  
 XX  
 PN US2003082535-A1.  
 XX  
 PD 01-MAY-2003.  
 XX  
 PF 07-MAR-2001; 2001US-00802110.  
 XX  
 PR 01-MAY-1996; 96US-00640672.  
 PR 19-JUL-1996; 96US-00684498.  
 PR 27-FEB-1997; 97US-00807138.  
 PR 29-APR-1997; 97WO-US007134.  
 PR 20-JAN-1998; 98US-00009483.  
 PR 13-MAY-1999; 99US-00311260.  
 XX  
 PA (LEUS/) LEUSHNER J.  
 PA (HUIM/) HUI M.  
 PA (DUNN/) DUNN J M.  
 PA (LACR/) LACROIX J.  
 XX  
 PI Leushner J, Hui M, Dunn JM, Lacroix J;  
 XX  
 DR WPI; 2003-576607/54.  
 XX  
 PT Microorganism detecting composition comprises dideoxynucleotide  
 PT triphosphate(s) corresponding to one of four deoxynucleotide  
 PT triphosphate, and thermally stable polymerase enzyme.  
 XX  
 PS Disclosure; Page 20; 94pp; English.  
 XX  
 CC The invention relates to a microorganism detecting composition. The  
 CC composition is used for detecting a target microorganism. It is used in a  
 CC bi-directional DNA sequencing method in several contexts including  
 CC detection of mutations, particularly mutations of medical significance,  
 CC in samples derived from a human patient, animal, plant, or microorganism;

determination of HLA (human leukocyte antigen) type ancillary to transplant procedures, detection and identification of microorganisms, particularly pathogenic microorganisms, in a sample and in situ sequencing reactions to produce sequencing fragments within a histological specimen which are then removed from a selected location on the tissue preparation and loaded onto a gel for sequence analysis. The invention allows an evaluation to be directly performed on a natural abundance DNA sample. It provides for bi-directional sequencing of DNA which requires combining a complex DNA-containing sample with only a single reaction mixture, thus reducing risk of error and contamination, and increasing the ease with which the procedure can be automated. The present sequencing represents a sequencing primer for identification of a microorganism.

Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1278 GTGGCCAGGCATCCT 1292  
 Db 16 GTGCCAGGCATCCT 2

RESULT 2349  
 ACD13554  
 ID ACD13554 standard; DNA; 20 BP.  
 AC ACD13554;  
 XX  
 XX  
 DT 14-AUG-2003 (first entry)  
 DE Human bi-directional promoter PCR/sequencing primer ON-DinB1-F3.  
 XX Human; ss; Goodpasture antigen binding protein; GPBP; COL4A3BP;  
 KW collagen 4 alpha 3 binding protein; DNA polymerase kappa; Pol kappa;  
 KW Goodpasture disease; cutaneous lupus; polK76; bi-directional promoter;  
 KW autoimmune disease; cancer; antisense therapy; PCR; primer.  
 XX Homo sapiens.  
 OS  
 XX US20030271165-A1.  
 PN  
 XX 06-FEB-2003.  
 PD  
 XX 07-DEC-2001; 2001US-00010920.  
 PF  
 XX 08-DEC-2000; 2000US-0254649P.  
 PR  
 XX (SAUS/) SAUS J.  
 PA  
 XX Saus J;  
 PI  
 XX WPI; 2003-479531/45.  
 DR  
 XX New isolated DNA polymerase, pol kappa 76, useful in identifying autoimmune disorders and in treating cancer and autoimmune disorders by modifying its expression.  
 PT  
 PT Example; Page 7; 54pp; English.  
 FS  
 XX The invention relates to an isolated pol kappa (k) 76 polypeptide (an alternatively spliced form of DNA polymerase kappa), appearing as AB007327 (encoded by the cDNA appearing as ACD13492). The gene for POLKappa is located on chromosome 5q12-13 in a head-head arrangement with the gene encoding Goodpasture antigen binding protein (GPBP or collagen 4 alpha 3 binding protein (COL4A3BP), associated with autoimmune diseases such as Goodpasture's disease and cutaneous lupus) i.e. has a bi-directional promoter. Also included are a recombinant expression vector comprising the polK76 cDNA, a host cell transfected with the vector, detecting (M1) polK76 (comprising providing a protein sample to be screened, contacting the protein sample to be screened with an anti-

polK76 antibody and detecting the formation of an antibody- polypeptide complexes, where the presence of the antibody-polypeptide complexes indicates the presence of polK76), detecting (M2) the polK76 nucleic acid in a sample (comprising contacting the sample with one or more polK76 PCR primer, carrying out PCR to generate PCR products, and identifying the polK76-specific PCR), detecting an autoimmune condition in a patient (comprising providing a tissue or body fluid sample from the patient, providing a control tissue or body fluid sample in which no autoimmune condition is present, and detecting an increase in pol k76 RNA expression in the tissue of body fluid samples compared to the control sample, where the increase indicates the presence of an autoimmune condition) and treating (M3) a patient with an autoimmune disorder or cancer by modifying the expression or activity of pol k76 in the patient. Modifying the expression or activity of polK76 or polK76 nucleic acid, such as by increasing or decreasing their expression or activity using antibodies or antisense therapy, is useful for treating an autoimmune disorder or cancer. The present sequence is a PCR and/or sequencing primer used in the analysis of bi-directional promoters of other genes (and/or of polkappa/GPBP), whose structure and sequence were compared to the polkappa/GPBP bi-directional promoter

Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 537 CCCCATCTTTGACAA 551  
 Db 4 CCCCACTTTGACAA 18

RESULT 2350  
 ADA97855  
 ID ADA97855 standard; DNA; 20 BP.  
 AC ADA97855;  
 XX  
 XX 20-NOV-2003 (first entry)  
 DT  
 DE Human tumour necrosis factor (TNF) inducible promoter PCR primer #57.  
 XX Human; tumour necrosis factor inducible promoter; TNF;  
 KW autoimmune disorder; cancer; PCR; immunosuppressive; cytostatic; ss;  
 KW primer.  
 XX Homo sapiens.  
 OS  
 XX US2003082745-A1.  
 PN  
 XX 01-MAY-2003.  
 PD  
 XX 07-DEC-2001; 2001US-00008721.  
 PF  
 XX 08-DEC-2000; 2000US-0254649P.  
 PR  
 XX (SAUS/) SAUS J.  
 PA  
 XX Saus J;  
 PI  
 XX WPI; 2003-606062/57.  
 DR  
 XX New tumor necrosis factor inducible promoters, useful for identifying promoters that are regulated by tumor necrosis factor, or for identifying candidate compounds for treating or preventing autoimmune disorders or cancer.  
 PT  
 PT Example; Page 8; 57pp; English.  
 FS  
 XX The invention relates to a tumour necrosis factor (TNF) inducible promoter. Also disclosed are an expression vector comprising one or more tumour necrosis factor inducible promoters and a recombinant host cell transfected with one or more expression vectors. The TNF inducible

CC promoters, expression vectors and host cells are useful for identifying  
CC promoters that are regulated by tumour necrosis factor or for identifying  
CC candidate compounds for treating or preventing autoimmune disorders or  
CC cancer. This sequence represents a PCR primer used for isolating a tumour  
CC necrosis factor inducible promoter of the invention.

XX Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 537 CCCCATCTTGACAA 551

Db 4 CCCCACTTGACAA 18

RESULT 2351

ADB90005/C

ID ADB90005 standard; DNA; 20 BP.

XX AC ADB90005;

XX 04-DEC-2003 (first entry)

XX Antisense oligonucleotide targeting mouse C3 component, ISIS140093.

KW Mouse; ss; antisense; complement component C3; inflammation;  
KW septic shock; multiple organ failure; hyperacute organ failure;  
KW autoimmune disorder; CNS inflammation; multiple sclerosis;  
KW atherosclerosis; tumour.

XX Mus musculus.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone and all cytosines are 5

FT -methyl cytosines"

FT modified\_base 1..5

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl nucleotides"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl nucleotides"

XX US2003096775-A1.

XX 22-MAY-2003.

XX 23-OCT-2001; 2001US-00001076.

XX 23-OCT-2001; 2001US-00001076.

XX (ISIS-) ISIS PHARM INC.

XX Graham MJ, Watt AT;

XX WPI; 2003-606441/57.

XX New antisense oligonucleotides targeted to a nucleic acid molecule  
PT encoding complement component C3, useful for treating a disease or  
PT condition associated with complement component C3, e.g. autoimmune  
PT disorder or infection.

XX Example 16; Page 27; 72pp; English.

XX The invention relates to a compound 8-50 nucleobases in length targeted  
CC to a nucleic acid molecule encoding complement component C3. The compound  
CC specifically hybridises with the nucleic acid molecule encoding

CC complement component C3 and inhibits the expression of complement  
CC component C3, or specifically hybridises with at least an 8-nucleobase  
CC portion of an active site on a nucleic acid molecule encoding complement  
CC component C3. Also included are a composition comprising the compound and  
CC a pharmaceutical carrier or diluent, inhibiting the expression of  
CC complement component C3 in cells or tissues (comprising contacting the  
CC cells or tissues with the compound cited above) and treating an animal  
CC comprising administering to the animal the compound cited above so that  
CC expression of complement component C3 is inhibited. The antisense  
CC compounds are useful for inhibiting the expression of complement  
CC component C3 in cells or tissues, or for treating an animal having a  
CC disease or condition associated with complement component C3 such as an  
CC autoimmune disorder (e.g. multiple sclerosis), an infection, or  
CC atherosclerosis, inflammation, septic shock, multiple organ failure,  
CC hyperacute organ failure and CNS inflammation. The compounds are also  
CC useful as research reagents and diagnostics, in distinguishing functions  
CC of various members of a biological pathway, or for preventing or delaying  
CC infection, inflammation or tumour formation. The present sequence is an  
CC antisense oligonucleotide targeting mouse C3.

XX Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 338 AGCACTTGACATGG 352

Db 20 AGCACTTGACATGG 6

RESULT 2352

ADCT3020

ID ADCT3020 standard; DNA; 20 BP.

XX AC ADCT3020;

XX 01-JAN-2004 (first entry)

XX O-glycan alpha2,8-sialyltransferase-related oligo - SEQ ID 10.

XX O-glycan alpha2,8-sialyltransferase;

XX beta-galactoside alpha2,6-sialyltransferase; cytostatic; virucide;

XX antiinflammatory; neuroprotective; cancer metastasis; viral infection;

XX inflammation; nerve tissue; ss; PCR; primer.

XX Unidentified.

XX WO2003064655-A1.

XX 07-AUG-2003.

XX 30-JAN-2003; 2003WO-JP000883.

XX 30-JAN-2002; 2002JP-00021159.

XX 24-APR-2002; 2002JP-00122673.

XX (RIKE ) RIKEN KK.

XX Takashima S, Tsujimoto M, Tsuji S;

XX WPI; 2003-627613/59.

XX Sugar-chain synthases which are sialyltransferases and encoded genes,  
PT applicable in drugs for inhibiting cancer metastasis, preventing viral  
PT infection, inhibiting inflammation and potentiating nerve tissues.

XX Example 1; SEQ ID NO 10; 97pp; Japanese.

XX The invention relates to a novel O-glycan alpha2,8-sialyltransferase  
CC having a novel substrate specificity and selectivity and a novel beta-  
CC galactoside alpha2,6-sialyltransferase having a novel substrate

CC specificity and selectivity. The enzymes of the invention demonstrate  
CC cytotostatic, virucide, antiinflammatory and neuroprotective activities and  
CC may be applicable in drugs for inhibiting cancer metastasis, preventing  
CC viral infection, inhibiting inflammation and potentiating nerve tissues.  
CC The current sequence is that of the sugar chain synthase-related  
CC oligonucleotide of the invention.

XX  
SQ Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1402 TTGCAGTTTGAGGGT 1416  
|||||  
Db 3 TTGCAGTTTGAGGAT 17

RESULT 2353  
ADG31625  
ID ADG31625 standard; DNA; 20 BP.  
XX  
AC ADG31625;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE PCR primer used to amplify human PKHD1 exon 46 for mutation analysis.  
XX  
KW PCR; ss; polycystic kidney and hepatic disease 1; PKHD1;  
KW autosomal recessive polycystic kidney disease; ARPKD;  
KW congenital hepatic fibrosis; human; nephrotropic; cell proliferation;  
KW cellular adhesion; repulsion; primer.  
XX  
OS Homo sapiens.

XX  
PN WO2003085088-A2.  
XX

XX 16-OCT-2003.

XX 03-FEB-2003; 2003WO-US003410.

XX 01-FEB-2002; 2002US-0353472P.

XX (UABR-) UAB RES FOUND.

XX Germino GG, Omuchic LF, Nagasawa Y, Guay-Woodford LM, Somolo S;  
XX Furu W;

XX WPI; 2003-877030/81.

XX New polycystic kidney and hepatic disease 1 polynucleotides and  
XX polypeptides, useful in diagnostic testing and for developing targeted  
XX therapeutic interventions for patients with autosomal recessive  
XX polycystic kidney disease.

XX Disclosure; Page 40; 41pp; English.

XX This invention relates to a novel nucleic acid that encodes the  
XX polycystic kidney and hepatic disease 1 (PKHD1) polypeptide. It has been  
XX identified that a mutation in the PKHD1 gene is associated with autosomal  
XX recessive polycystic kidney disease (ARPKD), which is characterised by  
XX enlarged kidneys and congenital hepatic fibrosis, and is most commonly  
XX observed in children and infants. The present invention describes the  
XX identification of the PKHD1 gene, mapped to human chromosome 6p21.1-p12,  
XX and splice variants thereof. The PKHD1 polynucleotides and polypeptides  
XX are useful in diagnostic testing and for developing targeted therapeutic  
XX interventions for patients with ARPKD. Furthermore, they exhibit  
XX nephrotropic activity and are involved in the regulation of cell  
XX proliferation, cellular adhesion and repulsion. This oligonucleotide  
XX sequence is a PCR primer used to amplify human PKHD1 exons for mutation  
XX analysis, in an exemplification of the invention.

XX Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1051 GCCAAGTCAATCCCA 1065  
|||||  
Db 2 GGCAAGTCAATCCCA 16

RESULT 2354  
ADF88295/c  
ID ADF88295 standard; DNA; 20 BP.

XX  
AC ADF88295;

XX  
DT 26-FEB-2004 (first entry)

XX Single nucleotide polymorphism detection primer, SEQ ID No 1878.

XX human; single nucleotide polymorphism; microarray; side effect; ss;  
KW primer; PCR.

XX  
OS Synthetic.

XX  
OS Homo sapiens.

XX  
PN JP2003235571-A.

XX  
PD 26-AUG-2003.

XX  
PF 12-FEB-2002; 2002JP-00034717.

XX  
PR 12-FEB-2002; 2002JP-00034717.

XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX  
XX WPI; 2003-820454/77.

XX Novel polynucleotide useful for detecting single nucleotide polymorphisms  
XX in human gene.

XX Claim 2; SEQ ID NO 1878; 704pp; Japanese.

XX The invention relates to a novel polynucleotide isolated and purified  
XX from a human gene having any one of 935 fully defined sequences as given  
XX in specification, or a sequence having a base substitution. The invention  
XX further relates to: an oligonucleotide containing single nucleotide  
XX polymorphisms; a PCR primer set chosen from the combination of two DNA  
XX fragments from any one of 1220 fully defined sequences as given in  
XX specification; a labelling probe containing the SNP containing oligo; and  
XX a microarray equipped with the SNP containing oligo. The isolated human  
XX gene of the invention is useful for detecting the single nucleotide  
XX polymorphisms in human gene. The isolated human gene is also useful for  
XX diagnosis of disease and determination of side effect to a medical agent.  
XX The isolated human gene is also effective in detecting single nucleotide  
XX polymorphisms in a human gene. This polynucleotide sequence represents  
XX one of the PCR primers used in the single nucleotide polymorphism  
XX detection method of the invention.

XX Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 123 CATGGATCGGATGAA 137  
|||||  
Db 19 CATGGAGCGGATGAA 5

RESULT 2355  
ADG93083  
ID ADG93083 standard; DNA; 20 BP.

```
XX AC ADG93083;
XX DT 11-MAR-2004 (first entry)
XX DE Human SHH specific antisense oligonucleotide, ISIS 104356.
XX KW Sonic hedgehog; SHH; cancer; autoimmune disease; inflammatory disorder;
XX KW antisense gene therapy; human; antisense; phosphorothioate backbone; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone where all cytidine
FT residues are 5-methyl cytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
XX US2003105041-A1.
XX 05-JUN-2003.
XX 16-NOV-2001; 2001US-00001844.
XX 16-NOV-2001; 2001US-00001844.
XX (BENN/) BENNETT C F.
XX (COWS/) COWSERT L M.
XX PI Bennett CF, Cowsert LM;
XX WPI; 2003-897023/82.
XX New compound for inhibiting Sonic hedgehog (SHH) expression in cells or
XX tissues and for treating an animal having a disease or condition
XX associated with SHH, such as cancer, an autoimmune disease, or an
XX inflammatory disorder.
XX Example 15; SEQ ID NO 37; 36pp; English.
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of Sonic hedgehog (SHH). The composition
XX comprises antisense compounds targeted to SHH. The antisense compound is
XX used to inhibit the expression of SHH in cells or tissues and to treat an
XX animal having a disease or condition associated with SHH, such as cancer,
XX an autoimmune disease or an inflammatory disorder. It is also useful in
XX differential and/or combinatorial analyses to elucidate expression
XX patterns of a portion or the entire complement of genes expressed within
XX cells and tissues. The antisense compounds are useful in antisense gene
XX therapy. The present sequence is an antisense oligonucleotide targeted
XX to human SHH DNA. This sequence is used to illustrate the method of the
XX invention.
XX Sequence 20 BP; 0 A; 9 C; 8 G; 3 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1211 CGGGCTCCAGGTGG 1225
DB 5 CGGGCTCCCGGTGG 19
|||||
```

```
RESULT 2356
ADH94427/c
XX ID ADH94427 standard; DNA; 20 BP.
XX AC ADH94427;
XX DT 22-APR-2004 (first entry)
XX DE Human gene PCR primer #1272.
XX KW human; gene sequence; single nucleotide polymorphism; SNP;
XX KW disease diagnosis; ss; PCR; primer.
XX OS Homo sapiens.
XX PN JP2003174883-A.
XX PD 24-JUN-2003.
XX PF 11-DEC-2001; 2001JP-00377637.
XX PR 11-DEC-2001; 2001JP-00377637.
XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX WPI; 2003-819215/77.
XX Polynucleotide for detecting single nucleotide polymorphisms existing in
XX human gene, contains isolated human gene having specified sequence.
XX Claim 2; SEQ ID NO 2264; 529pp; Japanese.
XX The invention comprises isolated human gene sequences and PCR primer
XX sequences which can be used to detect single nucleotide polymorphisms
XX (SNPs). The DNA sequences of the invention are useful for detecting SNPs
XX existing in human genes and for the diagnosis of human disease. The
XX present DNA sequence represents a human gene PCR primer of the invention.
XX Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 52 GCAGTGTGACTGCTG 66
DB 20 GCAGTGTGCTGCTG 6
|||||
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---

```
RESULT 2357
ABZ92732/c
XX ID ABZ92732 standard; DNA; 20 BP.
XX AC ABZ92732;
XX DT 17-OCT-2003 (first entry)
XX DE Human oligonucleotide sequence.
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KW lung inflammation; respiratory disease; ds.
XX OS Homo sapiens.
XX PN WO200285308-A2.
XX WPI; 2002-85308-A2.
XX 31-OCT-2002.
XX
```



PF 23-APR-2002; 2002WO-US013135.  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 7974; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1299 CGAGGAGTTCAGAC 1313  
Db | | | | | | | | | | | | | | | | | | | |  
16 CCAGGAGTTCAGAC 2

RESULT 2358  
ABZ87042  
ID ABZ87042 standard; DNA; 20 BP.  
XX  
AC ABZ87042;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
FN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX

PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 2284; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1473 GGAGCGGATCCACAA 1487  
Db | | | | | | | | | | | | | | | | | | | |  
3 GGAGCGGATCCACAA 17

RESULT 2359  
ABZ86781/c  
ID ABZ86781 standard; DNA; 20 BP.  
XX  
AC ABZ86781;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
FN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX



PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandraaagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 7253; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, for reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 1 A; 3 C; 11 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 236 GTGGTGGCGGCGAGTG 250  
Db 5 GTGGTGGCGGCGAGCG 19  
|||||  
  
RESULT 2362  
ABZ75745  
ID ABZ75745 standard; DNA; 20 BP.  
XX  
AC ABZ75745;  
XX  
XX 15-MAY-2003 (first entry)  
XX  
XX Sorting nexin 3 gene specific forward primer AF034546-83F.  
XX  
XX Gene expression; nucleic acid detection; drug development; forensic;  
XX sorting nexin 3; PCR; primer; ss.  
XX  
XX Synthetic.  
XX  
XX WO2003008542-A2.  
XX  
XX 30-JAN-2003.  
XX  
XX 12-JUL-2002; 2002WO-US021821.  
XX  
XX 16-JUL-2001; 2001US-0305154P.  
XX

PA (GENE-) GENE LOGIC INC.  
XX  
PI Scherf U;  
XX  
XX WPI; 2003-229568/22.  
XX  
XX Identifying at least one gene expressed across different cell or tissue  
PT types by monitoring control genes, useful in medical and biotechnological  
PT research and development, diagnostic testing, drug development and  
PT forensics.  
XX  
XX Disclosure; Page 41; 48pp; English.  
PS  
XX The invention relates to identifying at least one gene that is  
CC consistently expressed across different cell or tissue types in an  
CC organism. The method involves preparing gene expression profiles for  
CC different cell or tissue types, calculating a variation coefficient for  
CC at least one gene in each of the profiles across different cell or tissue  
CC types, and selecting any gene whose coefficient indicates that the gene  
CC is consistently expressed across the cell or tissue types. The methods  
CC and compositions of the present invention of quantitative nucleic acid  
CC detection assays, are useful in medical and biotechnological research and  
CC development, diagnostic testing, drug development and forensics. The  
CC present sequence represents a PCR primer specific for the sorting nexin 3  
CC gene, used in the course of the invention  
XX  
SQ Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 985 AAGCCCCGAGACCTG 999  
Db 1 AAGCCGCGACCTG 15  
|||||  
  
RESULT 2363  
ADA26843/C  
ID ADA26843 standard; DNA; 20 BP.  
XX  
AC ADA26843;  
XX  
XX 20-NOV-2003 (first entry)  
XX  
XX Human nuclear receptor subfamily 4 reverse PCR primer #127.  
XX  
XX Metastasis; neoplastic growth; detection; prediction;  
XX neoplastic growth marker; drug screening; cancer; tumour;  
XX gastrointestinal; prostate; breast; colorectal; diagnostic imaging;  
XX drug targeting; human; cytostatic; reverse transcription-PCR; RT-PCR;  
XX primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003031930-A2.  
XX  
XX 17-APR-2003.  
XX  
XX 02-OCT-2002; 2002WO-US031247.  
XX  
XX 09-OCT-2001; 2001US-0327332P.  
XX  
XX (UYJO ) UNIV JOHNS HOPKINS.  
XX  
XX Vogelstein B, Kinzler KW, Saha S, Bardelli A;  
XX  
XX WPI; 2003-393457/37.  
XX  
XX Identifying regions of neoplastic growth in a human body, useful for  
PT detecting or predicting metastasis, comprises administering to the human  
PT body an antibody or peptide that specifically binds to a protein marker  
PT of neoplastic growth.

XX PS Example 2; Page 22; 42pp; English.

XX CC The invention relates to methods for identifying regions of neoplastic

XX CC growth in a human patient, especially for detecting or predicting

XX CC metastasis. The methods involve determining whether a neoplastic growth

XX CC marker protein is overexpressed, either by the use of an antibody

XX CC specific for the protein, or by the use of PCR or hybridisation to detect

XX CC nucleic acids encoding the marker proteins. A set of neoplastic growth

XX CC markers are disclosed (SAGE (serial analysis of gene expression) tags for

XX CC these are given in ADA26759-ADA26796), with protein tyrosine phosphatase

XX CC type IVA member 3 (also known as PRL-3) being a preferred neoplastic

XX CC growth marker. The neoplastic growth markers are specifically expressed

XX CC at a higher level in metastatic cancers, compared with advanced and early

XX CC stage cancers and normal cells from which the cancer is derived.

XX CC Overexpression of the neoplastic growth markers is taken as an indication

XX CC that the tissue has a propensity to metastasise. The invention also

XX CC encompasses methods for treating a patient with an advanced or metastatic

XX CC cancer, and for identifying candidate drugs for treating advanced or

XX CC metastatic cancers. The methods of the invention are useful for

XX CC identifying regions of neoplastic growth, for detecting or predicting

XX CC metastasis, or identifying candidate drugs for treating advanced or

XX CC metastatic cancers. The invention is particularly applicable to

XX CC gastrointestinal, prostate, breast or colorectal cancers. Antibodies

XX CC which bind to the neoplastic growth marker proteins are additionally

XX CC useful for diagnostic imaging and for targeting cytotoxic or

XX CC chemotherapeutic drugs. The present sequence represents a reverse

XX CC transcription-PCR (RT-PCR) primer used to study the upregulation of

XX CC neoplastic growth marker genes in an example of the invention.

SQ Sequence 20 BP; 4 A; 2 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. NO. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 538 CCCATCTTGACAAAG 552

DB 16 CCCATCATTTGACAAAG 2

RESULT 2364

ADM34276/C

ID ADM34276 standard; DNA; 20 BP.

XX AC ADM34276;

XX DT 03-JUN-2004 (first entry)

XX DE Mouse p38 MAPK antisense oligonucleotide #3.

XX KW antisense; p38 mitogen activated protein kinase; p38 MAPK;

XX KW inflammatory disease; autoimmune disease; rheumatoid arthritis;

XX KW heart disease; ss; mouse.

XX OS Mus musculus.

XX FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= b

FT /mod\_base= Other

FT /note= "All cytosines are 5-methyl cytosines"

FT modified\_base 1..5

FT /\*tag= a

FT /mod\_base= Other

FT /note= "2'-methoxyethoxy nucleotides"

FT modified\_base 6..15

FT /\*tag= c

FT /mod\_base= Other

FT /note= "Phosphorothioate linkages"

FT modified\_base 16..20

FT /\*tag= d

FT /mod\_base= Other

FT /note= "2'-methoxyethoxy nucleotides"

XX PN US2003176383-A1.

XX PD 18-SEP-2003.

XX PF 09-SEP-2002; 2002US-00238442.

XX PR 06-APR-1999; 99US-00286904.

XX PR 15-AUG-2000; 2000US-00640101.

XX PA (MONI/) MONIA B P.

XX PA (GAAR/) GAARDE W A.

XX PA (NERO/) NERO P.

XX PA (MCKA/) MCKAY R.

XX XX Monia BP, Gaarde WA, Nero P, McKay R;

XX PI WPI; 2003-898587/82.

XX DR New antisense oligonucleotides for modulating p38 mitogen activated

XX PT protein kinase (MAPK) expression, useful for diagnosing, preventing or

XX PT treating diseases associated with p38 MAPK, e.g. inflammation or heart

XX PT disease.

XX XX Example 5; SEQ ID NO 65; 48pp; English.

XX XX The invention relates to an antisense oligonucleotide 8-30 nucleobases in

XX CC length targeted to the 5'-untranslated region, translational start site,

XX CC translational termination region or 3'-untranslated region of a nucleic

XX CC acid molecule encoding a p38 mitogen activated protein kinase (MAPK). The

XX CC where the antisense compound inhibits the expression of the p38 MAPK. The

XX CC antisense oligonucleotide is useful for inhibiting the expression of p38

XX CC MAPK in cells or tissues. It is also useful for treating an animal having

XX CC a disease or condition associated with p38 MAPK, e.g. an inflammatory or

XX CC an autoimmune disease (e.g. rheumatoid arthritis) or a heart disease. In

XX CC addition, the compound is used for diagnostics, prophylaxis, or as

XX CC research reagents or kits. The present sequence represents a p38 MAPK

XX CC antisense oligonucleotide of the invention.

XX SQ Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. NO. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1638 GCAGCGGCTGCAGGG 1652

DB 15 GCAGCGGCTGCAGGG 1

RESULT 2365

ABD23011/C

ID ABD23011 standard; DNA; 20 BP.

XX AC ABD23011;

XX DT 29-JUL-2004 (first entry)

XX XX Human myosin X-derived oligonucleotide SEQ ID 2023.

XX DE Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

XX KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX KW pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.

XX XX WO200285309-A2.

XX PN

XX PD 31-OCT-2002.  
 XX PF 23-APR-2002; 2002WO-US013143.  
 XX PR 24-APR-2001; 2001US-0286036P.  
 XX PA (EPIG-) EPIGENESIS PHARM INC.  
 XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX WPI; 2003-093058/08.  
 XX Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX Claim 15; SEQ ID NO 2023; 763pp; English.  
 XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 515 TGGAGAGCTGATCC 529  
 Db 19 TGGAGAGCTGATCC 5  
 RESULT 2366  
 ID ABD28241  
 XX ABD28241 standard; DNA; 20 BP.  
 AC ABD28241;  
 XX DT 29-JUL-2004 (first entry)  
 XX R19956-derived oligonucleotide SEQ ID 7253.  
 XX

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX Homo sapiens.  
 OS WO200285309-A2.  
 PN 31-OCT-2002.  
 PD 23-APR-2002; 2002WO-US013143.  
 PF 24-APR-2001; 2001US-0286036P.  
 PR (EPIG-) EPIGENESIS PHARM INC.  
 PA NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX WPI; 2003-093058/08.  
 XX Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX Claim 15; SEQ ID NO 7253; 763pp; English.  
 XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX SQ Sequence 20 BP; 1 A; 3 C; 11 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 236 GTGGTGGCGGCGATG 250  
 Db 5 GTGGTGGCGGCGAGG 19

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CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1473 GGAGCGGATCCACAA 1497
DB 3 GGAGCGGACCAAA 17

RESULT 2368
ABD27162
ID ABD27162 standard; DNA; 20 BP.
XX
AC ABD27162;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA486518-derived oligonucleotide SEQ ID 6174.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
WPI; 2003-093058/08.
XX
Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
Claim 15; SEQ ID NO 2284; 763pp; English.
XX
This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC
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CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1473 GGAGCGGATCCACAA 1497
DB 3 GGAGCGGACCAAA 17

RESULT 2368
ABD27162
ID ABD27162 standard; DNA; 20 BP.
XX
AC ABD27162;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA486518-derived oligonucleotide SEQ ID 6174.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
WPI; 2003-093058/08.
XX
Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
Claim 15; SEQ ID NO 6174; 763pp; English.
XX
This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC
```

CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX  
 SQ Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1480 ATCCAGAACTTCCT 1494  
 Db 3 ATCCAGAACTTCCT 17  
 RESULT 2369  
 ABD28962/c  
 ID ABD28962 standard; DNA; 20 BP.  
 AC ABD28962;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE N58473-derived oligonucleotide SEQ ID 7974.  
 XX  
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 XN WO200285309-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI Nyce JW, Li Y, Sandraeagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-093058/08.  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 PS Claim 15; SEQ ID NO 7974; 763pp; English.  
 XX  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX  
 SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1299 CCAGGAGTTCAAGAC 1313  
 Db 16 CCAGGAGTTCAAGAC 2  
 RESULT 2370  
 ADH54805  
 ID ADH54805 standard; DNA; 20 BP.  
 AC ADH54805;  
 XX  
 DT 25-MAR-2004 (first entry)  
 XX  
 DE Human VEGF-C target region ISIS 114956.  
 XX  
 KW human; ss; VEGF-C; cardiovascular disorder; atherosclerosis;  
 KW diabetic retinopathy; autoimmune disorder; inflammatory disorder;  
 KW vascular endothelial growth factor.  
 XX  
 OS Homo sapiens.  
 XX  
 XN US2003232437-A1.  
 XX  
 PD 18-DEC-2003.  
 XX  
 PF 17-JUN-2002; 2002US-00173718.  
 XX  
 PR 17-JUN-2002; 2002US-00173718.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Zhang H, Dobie KW;  
 XX  
 DR WPI; 2004-061284/06.  
 XX  
 PT New compounds, particularly antisense oligonucleotides targeted to a  
 PT nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),  
 PT useful for treating atherosclerosis, diabetic retinopathy, or  
 PT inflammatory disorders.



PS Example 15; SEQ ID NO 106; 83pp; English.

XX The invention relates to a compound targeted to and which specifically

CC hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the

CC expression of VEGF-C. The compound, composition and methods are useful

CC for treating a disease or condition associated with VEGF-C, such as a

CC cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or

CC an autoimmune or inflammatory disorder. They are also useful in research

CC and diagnostics for modulating the expression of VEGF-C. The present

CC sequence represents a human VEGF-C target region.

XX Sequence 20 BP; 2 A; 8 C; 9 G; 1 T; 0 U; 0 Other;

SQ

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGGCCCGCGGC 90

DB 4 GGAGGGCCCGCGGC 18

RESULT 2371

ADH54751/c

ID ADH54751 standard; DNA; 20 BP.

XX

AC ADH54751;

XX

DT 25-MAR-2004 (first entry)

XX

DE Human VEGF-C antisense oligonucleotide ISIS 196824.

XX

KW human; ss; VEGF-C; cardiovascular disorder; atherosclerosis;

KW diabetic retinopathy; autoimmune disorder; inflammatory disorder;

KW vascular endothelial growth factor; antisense.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN US2003232437-A1.

XX

PD 18-DEC-2003.

XX

PF 17-JUN-2002; 2002US-00173718.

XX

PR 17-JUN-2002; 2002US-00173718.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Zhang H, Dobie KW;

XX

PT WPT; 2004-061284/06.

XX

DR

XX

PT New compounds, particularly antisense oligonucleotides targeted to a

PT nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),

PT useful for treating atherosclerosis, diabetic retinopathy, or

PT inflammatory disorders.

XX

PS Example 15; SEQ ID NO 52; 83pp; English.

XX

CC The invention relates to a compound targeted to and which specifically

CC hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the

CC expression of VEGF-C. The compound, composition and methods are useful

CC for treating a disease or condition associated with VEGF-C, such as a

CC cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or

CC an autoimmune or inflammatory disorder. They are also useful in research

CC and diagnostics for modulating the expression of VEGF-C. The present

CC sequence represents a human VEGF-C antisense oligonucleotide.

XX

SQ Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGGCCCGCGGC 90

DB 4 GGAGGGCCCGCGGC 18

RESULT 2371

ADH54751/c

ID ADH54751 standard; DNA; 20 BP.

XX

AC ADH54751;

XX

DT 25-MAR-2004 (first entry)

XX

DE Human beta-site APP-cleaving enzyme 2 DNA target sequence #8.

XX

KW Antisense therapy; human; beta-site APP-cleaving enzyme 2;

KW hyperproliferative disorder; cancer; neurodegenerative disorder;

KW Alzheimer's disease; cytostatic; neuroprotective; nootropic; ds.

XX

OS Homo sapiens.

XX

PN US2003224517-A1.

XX

PD 04-DEC-2003.

XX

PF 04-JUN-2002; 2002US-00163272.

XX

PR 04-JUN-2002; 2002US-00163272.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Dobie KW;

XX

PT WPT; 2004-022081/02.

XX

DR

XX

PT New compounds, particularly antisense oligonucleotides targeted to a

PT nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating

PT a disease or condition, e.g. cancer, Alzheimer's disease or

PT neurodegenerative disease.

XX

PS Example 15; SEQ ID NO 96; 59pp; English.

XX

CC The present invention relates to antisense compounds targeted to a

CC nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense

CC compound comprises an antisense oligonucleotide that specifically

CC hybridises with the nucleic acid and inhibits the expression of beta-site

CC APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric

CC oligonucleotide. The antisense oligonucleotide comprises at least one

CC modified internucleoside linkage, preferably a phosphorothioate linkage.

CC It also comprises at least one modified sugar moiety, preferably a 2'-O-

CC methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further

CC comprises at least one modified nucleobase, preferably a 5-

CC methylcytosine. The antisense oligonucleotides are useful for the

CC treatment of diseases such as hyperproliferative disorders, e.g. cancer,

CC and neurodegenerative disorders such as Alzheimer's disease. The present

CC sequence represents a human beta-site APP-cleaving enzyme 2 DNA target

CC sequence for an antisense oligonucleotide.

XX

SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 510 CTACCTGGAGAGCT 524

DB 6 CTACCTGGAGAGCT 20

RESULT 2373

ADH45075/c

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGGCCCGCGGC 90

DB 17 GGAGGGCCCGCGGC 3

RESULT 2372

ADH45152

ID ADH45152 standard; DNA; 20 BP.

XX

AC ADH45152;

XX

DT 25-MAR-2004 (first entry)

XX

DE Human beta-site APP-cleaving enzyme 2 DNA target sequence #8.

XX

KW Antisense therapy; human; beta-site APP-cleaving enzyme 2;

KW hyperproliferative disorder; cancer; neurodegenerative disorder;

KW Alzheimer's disease; cytostatic; neuroprotective; nootropic; ds.

XX

OS Homo sapiens.

XX

PN US2003224517-A1.

XX

PD 04-DEC-2003.

XX

PF 04-JUN-2002; 2002US-00163272.

XX

PR 04-JUN-2002; 2002US-00163272.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Dobie KW;

XX

PT WPT; 2004-022081/02.

XX

DR

XX

PT New compounds, particularly antisense oligonucleotides targeted to a

PT nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating

PT a disease or condition, e.g. cancer, Alzheimer's disease or

PT neurodegenerative disease.

XX

PS Example 15; SEQ ID NO 96; 59pp; English.

XX

CC The present invention relates to antisense compounds targeted to a

CC nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense

CC compound comprises an antisense oligonucleotide that specifically

CC hybridises with the nucleic acid and inhibits the expression of beta-site

CC APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric

CC oligonucleotide. The antisense oligonucleotide comprises at least one

CC modified internucleoside linkage, preferably a phosphorothioate linkage.

CC It also comprises at least one modified sugar moiety, preferably a 2'-O-

CC methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further

CC comprises at least one modified nucleobase, preferably a 5-

CC methylcytosine. The antisense oligonucleotides are useful for the

CC treatment of diseases such as hyperproliferative disorders, e.g. cancer,

CC and neurodegenerative disorders such as Alzheimer's disease. The present

CC sequence represents a human beta-site APP-cleaving enzyme 2 DNA target

CC sequence for an antisense oligonucleotide.

XX

SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 510 CTACCTGGAGAGCT 524

DB 6 CTACCTGGAGAGCT 20

RESULT 2373

ADH45075/c



```
ID XX ADH45075 standard; DNA; 20 BP.
AC XX ADH45075;
XX
DT XX 25-MAR-2004 (first entry)
XX
DE XX Human beta-site APP-cleaving enzyme 2, antisense oligonucleotide #9.
XX
DE XX Antisense therapy; human; beta-site APP-cleaving enzyme 2;
XX KW hyperproliferative disorder; cancer; neurodegenerative disorder;
XX KW Alzheimer's disease; cytostatic; neuroprotective; nootropic;
XX KW phosphorothioate; ss.
XX
OS XX Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX
XX US2003224517-A1.
XX
XX 04-DEC-2003.
XX
XX 04-JUN-2002; 2002US-00163272.
XX
XX 04-JUN-2002; 2002US-00163272.
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-022081/02.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating
XX a disease or condition, e.g. cancer, Alzheimer's disease or
XX neurodegenerative disease.
XX
XX Example 15; SEQ ID NO 19; 59pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridises with the nucleic acid and inhibits the expression of beta-site
XX APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric
XX oligonucleotide. The antisense oligonucleotide comprises at least one
XX modified internucleoside linkage, preferably a phosphorothioate linkage.
XX It also comprises at least one modified sugar moiety, preferably a 2'-O-
XX methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
XX comprises at least one modified nucleobase, preferably a 5-
XX methylcytosine. The antisense oligonucleotides are useful for the
XX treatment of diseases such as hyperproliferative disorders, e.g. cancer,
XX and neurodegenerative disorders such as Alzheimer's disease. The present
XX sequence represents an antisense oligonucleotide used in the examples of
XX the present invention.
XX
SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 510 CTACTGGAGAGCT 524
Db 15 CTACTGGAGATGCT 1
|||||
RESULT 2374
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AD128277
ID AD128277 standard; cDNA; 20 BP.
XX
AC AD128277;
XX
DT XX 22-APR-2004 (first entry)
XX
DE XX Human PRL3 antisense target region #21.
XX
XX Human; antisense gene therapy; ss; PRL3;
XX KW protein tyrosine phosphatase type IVA member 3; colorectal cancer;
XX KW diabetes; glucose tolerance; insulin resistance; obesity;
XX KW hyperproliferative disorder; cytostatic.
XX
OS XX Homo sapiens.
XX
XX US2003235911-A1.
XX
XX 25-DEC-2003.
XX
XX 20-JUN-2002; 2002US-00177554.
XX
XX 20-JUN-2002; 2002US-00177554.
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW, Zhang H;
XX
XX WPI; 2004-070585/07.
XX
XX New antisense oligonucleotide, comprising a sequence targeted to a
XX nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL
XX -3), useful for preparing a composition for treating hyperproliferative
XX disorders, e.g., cancer.
XX
XX Example 16; SEQ ID NO 184; 77pp; English.
XX
XX The invention relates to a compound comprising a sequence comprising 8-80
XX base pairs (bp) targeted to a nucleic acid encoding protein tyrosine
XX phosphatase type IVA member 3 (PRL-3), that specifically hybridises with
XX the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is
XX an antisense oligonucleotide (AO). Also included are a composition
XX comprising the compound and a carrier or diluent, inhibiting the
XX expression of PRL-3 in cells or tissues, treating an animal having or
XX suspected of having a disease or condition associated with PRL-3 and
XX screening for an antisense compound. The antisense oligonucleotide is
XX useful for preparing a composition for treating hyperproliferative
XX disorder, particularly cancer (e.g. colorectal cancer), diabetes,
XX reduced glucose tolerance, insulin resistance and obesity. The present
XX sequence is a Human PRL3 cDNA AO target region.
XX
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 123 CATGGATCGGATGAA 137
Db 1 CATGGCTCGGATGAA 15
|||||
RESULT 2375
AD128141/c
ID AD128141 standard; DNA; 20 BP.
XX
AC AD128141;
XX
DT XX 22-APR-2004 (first entry)
XX
DE XX Antisense oligonucleotide targeting human PRL3 ISIS 217468.
XX
XX Human; antisense gene therapy; ss; PRL3;
```

KW protein tyrosine phosphatase type IVA member 3; colorectal cancer;  
KW diabetes; glucose tolerance; insulin resistance; obesity;  
XX hyperproliferative disorder; cytostatic.

XX Homo sapiens.

OS Key Location/Qualifiers

FT modified\_base 1..20 /tag= b

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone and all cytidines are 5

FT -methyl cytidines"

FT modified\_base 1..5

FT /tag= a

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl residues"

FT modified\_base 16..20

FT /tag= c

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl residues"

XX US2003235911-A1.

PN XX

XX 25-DEC-2003.

XX 20-JUN-2002; 2002US-00177554.

XX 20-JUN-2002; 2002US-00177554.

XX (ISIS-) ISIS PHARM INC.

XX Dobie KW, Zhang H;

PI WPI; 2004-070585/07.

DR New antisense oligonucleotide, comprising a sequence targeted to a

PT nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL

PT -3), useful for preparing a composition for treating hyperproliferative

PT disorders, e.g., cancer.

XX Example 15; SEQ ID NO 48; 77pp; English.

PS The invention relates to a compound comprising a sequence comprising 8-80

CC base pairs (bp) targeted to a nucleic acid encoding protein tyrosine

CC phosphatase type IVA member 3 (PRL-3), that specifically hybridises with

CC the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is

CC an antisense oligonucleotide (AO). Also included are a composition

CC comprising the compound and a carrier or diluent, inhibiting the

CC expression of PRL-3 in cells or tissues, treating an animal having or

CC suspected of having a disease or condition associated with PRL-3 and

CC screening for an antisense compound. The antisense oligonucleotide is

CC useful for preparing a composition for treating hyperproliferative

CC disorder, particularly cancer (e.g. colorectal cancer), diabetes,

CC reduced glucose tolerance, insulin resistance and obesity. The present

CC sequence is an antisense oligonucleotide targeting human PRL3.

XX Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 123 CATGGATCGGATCAA 137

DB 20 CATGGCTCGATGAA 6

RESULT 2376

ADJ85574

ID ADJ85574 standard; DNA; 20 BP.

XX AC ADJ85574;

XX

DT 06-MAY-2004 (first entry)

XX Nucleic acid analysis-related Tag probe SeqID642.

DE restriction endonuclease site; T3 promoter site; Tag gene; Poly A site;

XX T7 Promoter; nucleic acid analysis; synthetic Tag gene; assay control;

KW assay development; product development; product validation;

KW quality control; probe; ss.

XX Synthetic.

OS Unidentified.

XX WO2004007684-A2.

PN 22-JAN-2004.

PD 14-JUL-2003; 2003WO-US021990.

XX 12-JUL-2002; 2002US-0395530P.

PR (AFFY-) AFFYMETRIX INC.

PA Christians FC;

XX WPI; 2004-122923/12.

DR New DNA molecules made by annealing and extending overlapping 60mer

PT oligonucleotides, useful in producing synthetic Tag genes useful as assay

PT controls, in assay development, product development and for quality

PT control.

XX Disclosure; SEQ ID NO 642; 91pp; English.

PS This invention relates to a novel DNA molecule which comprises a DNA

XX molecule made up of the following elements in a 5' to 3' direction: a

CC first restriction endonuclease site; a T3 promoter site; at least one Tag

CC gene comprising at least 5 20mer Tag sequences; a Poly A site having at

CC least 21 consecutive A residues; a second restriction endonuclease site

CC which may be the same or different than the first restriction

CC endonuclease site; or a T7 Promoter on the opposite strand as the T3

CC promoter. The invention may be useful in nucleic acid analysis, in

CC particular to synthetic Tag genes useful as assay controls, in assay

CC development, product development and validation and for quality control.

CC The present sequence is that of a Tag oligonucleotide probe which may be

CC used during the creation of the novel DNA molecule of the invention.

XX SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1264 CCAACTGAGGAGACG 1278

DB 2 CCTACTGAGGAGACG 16

RESULT 2377

ADJ86243

ID ADJ86243 standard; DNA; 20 BP.

XX AC ADJ86243;

XX 06-MAY-2004 (first entry)

DT Nucleic acid analysis-related Tag probe SeqID1311.

DE restriction endonuclease site; T3 promoter site; Tag gene; Poly A site;

XX T7 Promoter; nucleic acid analysis; synthetic Tag gene; assay control;

KW assay development; product development; product validation;

KW quality control; probe; ss.

XX Synthetic.

XX



CC demonstrates cytostatic activities and may be useful for treating a  
CC disease or condition associated with PTPRA, such as a hyperproliferative  
CC disorder or metabolic disorder, as well as in research and diagnostics  
CC for modulating the expression of PTPRA. The current sequence is that of  
CC an antisense 2'-MOE (2'-methoxyethyl) gapmer oligonucleotide which was  
CC targeted to human PTPRA of the invention.

XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 866 AGCACTACTGGATG 880  
|||||  
DB 1 AGCAGCACCTGGATG 15

RESULT 2380  
ADK12304/c  
ID ADK12304 standard; DNA; 20 BP.

XX AC ADK12304;

XX DT 20-MAY-2004 (first entry)

XX DE Mouse complement component C3 DNA, antisense oligonucleotide #50.

XX KW Antisense therapy; mouse; complement component C3; autoimmune disorder;  
XX multiple sclerosis; infection; atherosclerosis; neuroprotective;  
XX antiatherosclerotic; antimicrobial; antiinflammatory; cytostatic;  
XX phosphorothioate; ss.

XX OS Mus musculus.

XX FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER

FT /note= "This oligonucleotide has a phosphorothioate  
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'  
FT and 3' ends, which are 5 nucleotides in length at each  
FT end. All cytidine residues are 5-methylcytidines"

XX PN US2004043956-A1.

XX PD 04-MAR-2004.

XX PF 18-AUG-2003; 2003US-00642802.

XX PR 23-OCT-2001; 2001US-00001076.

XX (GRAH/) GRAHAM M J.  
XX (WATT/) WATT A T.

XX PI Graham MJ, Watt AT;

XX XX WPI; 2004-225730/21.

XX New antisense compound targeted to a nucleic acid molecule encoding  
PT complement component C3, useful for treating multiple sclerosis, an  
PT infection or atherosclerosis.

XX Example 16; SEQ ID NO 162; 74pp; English.

XX The present invention relates to antisense compounds targeted to a  
CC nucleic acids encoding human and mouse complement component C3. The  
CC antisense compound comprises an antisense oligonucleotide that  
CC specifically hybridizes with the nucleic acid and inhibits the expression  
CC of complement component C3 in cells. The antisense oligonucleotide is a  
CC chimeric oligonucleotide. The antisense oligonucleotide comprises at  
CC least one modified internucleoside linkage, preferably a phosphorothioate  
CC linkage. It also comprises at least one modified sugar moiety, preferably

CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide  
CC further comprises at least one modified nucleobase, preferably a 5-  
CC methylcytosine. The antisense oligonucleotides are useful for the  
CC treatment of diseases such as autoimmune disorders e.g. multiple  
CC sclerosis, infections, and atherosclerosis. The present sequence  
CC represents an antisense oligonucleotide used in the examples of the  
CC present invention.

XX Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 338 AGGACTTGAGATGG 352  
|||||  
DB 20 AGGACTTGAGATGG 6

RESULT 2381  
ADL23570  
ID ADL23570 standard; DNA; 20 BP.

XX AC ADL23570;

XX DT 20-MAY-2004 (first entry)

XX DE Detector oligonucleotide used in DNA sequencing.

XX KW DNA sequencing; generic gene chip; diagnosis; genomic analysis;  
XX gene expression analysis; ss.

XX OS Unidentified.

XX FH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Fluorophore labelled residue"

XX US6692915-B1.

XX 17-FEB-2004.

XX 20-JUL-2000; 2000US-00619812.

XX 22-JUL-1999; 99US-0145043P.

XX (NALL/) NALLUR G N.

XX Nallur GN;

XX WPI; 2004-236461/22.

XX Identifying and quantifying a nucleic acid in a sample, by providing  
PT subsequence sets present in the sample, useful e.g. for analyzing  
PT differential nucleic acid expression.

XX Example 9; SEQ ID NO 11; 30pp; English.

XX The invention relates to methods and devices for sequencing a  
CC polynucleotide by determining subsets of composite subsequences present  
CC in nucleic acid subsamples generated from the sample polynucleotide. A  
CC hairpin primer interrogates the composite subsequence in a two-step  
CC process resulting first in a polymerase extended product whose synthesis  
CC identifies the first subsequence of the composite subsequence. The second  
CC products or amplified products therefrom to an array of capture probes  
CC wherein each capture probe is positionally distinguishable from other  
CC capture probes. The method is useful for sequencing a polynucleotide on a  
CC generic gene chip. The invention is useful for identification and  
CC quantitative determination of the presence of nucleic acids in a sample,  
CC in particular to methods of genomic analysis, for identifying differences

CC in the relative abundance of nucleic acids in a mixture of nucleic acids,  
 CC and generally to diagnostic aids for analysing nucleic acid composition  
 CC and content of biological samples, e.g. medical and agricultural. The  
 CC method can be applied to gene expression analysis by identifying and  
 CC quantifying cDNA. The method is rapid and cost effective. The present  
 CC sequence is a detector oligonucleotide used in an exemplification of the  
 CC invention.

SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1299 CGAGGAGTTCAGAC 1313  
 Db 5 CCAGGAGTTCAGAC 19  
 |||||

RESULT 2382  
 ADL00940/c  
 ID ADL00940 standard; DNA; 20 BP.

XX AC ADL00940;

XX DT 20-MAY-2004 (first entry)

XX DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #473.

XX KW Human; VEGF co-regulated chemokine-1; VCC-1;  
 KW vascular endothelial growth factor; ss; antisense compound;  
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;  
 KW 5-methylcytosine; antisense oligonucleotide; diabetes;  
 KW immunological disorder; cardiovascular disorder; neurological disorder;  
 KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;  
 KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;  
 KW fibrosis; myocardial infarction; wound healing; bone fracture;  
 KW cartilage damage; tissue regeneration; organ regeneration;  
 KW periodontal disease; gut regeneration; atrial fibrillation.

XX OS Homo sapiens.

XX XN WO2004016224-A2.

XX PD 26-FEB-2004.

XX PF 19-AUG-2003; 2003WO-US025891.

XX PR 19-AUG-2002; 2002US-0404484P.

XX PA (PHAA ) PHARMACIA CORP.

XX PI Weinstein EJ;

XX DR WPI; 2004-192065/18.

XX PT New antisense compounds targeted to a nucleic acid molecule encoding  
 PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),  
 PT useful for treating VCC-1-associated disorders, e.g. diabetes or a  
 PT neurologic disorder.

XX PS Claim 4; SEQ ID NO 473; 336pp; English.

XX CC The invention relates to an antisense compound targeted to a nucleic acid  
 CC molecule encoding human vascular endothelial growth factor (VEGF) co-  
 CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and  
 CC inhibits the expression of VCC-1. The invention also relates to a  
 CC composition comprising the antisense compound, a method of inhibiting the  
 CC expression of VCC-1 in cells or tissues comprising contacting the cells  
 CC or tissues with the antisense compound and a method of treating a human  
 CC having a disease or condition associated with VCC-1 comprising  
 CC administering the antisense compound to an animal to inhibit expression  
 CC of VCC-1. The antisense oligonucleotide comprises at least one modified

CC internucleoside linkage, preferably a phosphorothioate linkage. It also  
 CC comprises at least one modified sugar moiety, preferably a 2'-O-  
 CC methoxyethyl sugar moiety, and at least one modified nucleobase,  
 CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably  
 CC is a chimeric oligonucleotide. The antisense compound is useful for  
 CC treating a disease or condition associated with VCC-1, such as diabetes,  
 CC an immunological disorder, a cardiovascular disorder, a neurological  
 CC disorder, ischaemia, reperfusion injury, cancer or an angiogenic  
 CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,  
 CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1  
 CC antisense oligonucleotides may also be used for wound healing, for  
 CC healing of bone fractures and cartilage damage, for regeneration of  
 CC tissues or organs, for treating periodontal diseases, for gut protection  
 CC or regeneration, for treatment of lung or liver fibrosis or for  
 CC management of atrial fibrillation. This sequence represents an antisense  
 CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of  
 CC the invention.

SQ Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1176 CTTCTATGAGATGGC 1190  
 Db 18 CTTCTAGGAGATGGC 4  
 |||||

RESULT 2383

ADL00909/c

ID ADL00909 standard; DNA; 20 BP.

XX AC ADL00909;

XX DT 20-MAY-2004 (first entry)

XX DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #442.

XX KW Human; VEGF co-regulated chemokine-1; VCC-1;  
 KW vascular endothelial growth factor; ss; antisense compound;  
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;  
 KW 5-methylcytosine; antisense oligonucleotide; diabetes;  
 KW immunological disorder; cardiovascular disorder; neurological disorder;  
 KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;  
 KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;  
 KW fibrosis; myocardial infarction; wound healing; bone fracture;  
 KW cartilage damage; tissue regeneration; organ regeneration;  
 KW periodontal disease; gut regeneration; atrial fibrillation.

XX OS Homo sapiens.

XX XN WO2004016224-A2.

XX PD 26-FEB-2004.

XX PF 19-AUG-2003; 2003WO-US025891.

XX PR 19-AUG-2002; 2002US-0404484P.

XX PA (PHAA ) PHARMACIA CORP.

XX PI Weinstein EJ;

XX DR WPI; 2004-192065/18.

XX PT New antisense compounds targeted to a nucleic acid molecule encoding  
 PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),  
 PT useful for treating VCC-1-associated disorders, e.g. diabetes or a  
 PT neurologic disorder.

XX PS Claim 4; SEQ ID NO 442; 336pp; English.



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XX PD 26-FEB-2004.
XX PF 19-AUG-2003; 2003WO-US025891.
XX PR 19-AUG-2002; 2002US-040484P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Weinstein EJ;
XX PI WPI; 2004-192065/18.
XX DR
XX PT New antisense compounds targeted to a nucleic acid molecule encoding
XX PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
XX PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
XX PT neurologic disorder.
XX PS Claim 4; SEQ ID NO 782; 336pp; English.
XX CC The invention relates to an antisense compound targeted to a nucleic acid
XX CC molecule encoding human vascular endothelial growth factor (VEGF) co-
XX CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
XX CC inhibits the expression of VCC-1. The invention also relates to a
XX CC composition comprising the antisense compound, a method of inhibiting the
XX CC expression of VCC-1 in cells or tissues comprising contacting the cells
XX CC or tissues with the antisense compound and a method of treating a human
XX CC having a disease or condition associated with VCC-1 comprising
XX CC administering the antisense compound to an animal to inhibit expression
XX CC of VCC-1. The antisense oligonucleotide comprises at least one modified
XX CC internucleoside linkage, preferably a phosphorothioate linkage. It also
XX CC comprises at least one modified sugar moiety, preferably a 2'-O-
XX CC methoxyethyl sugar moiety, and at least one modified nucleobase,
XX CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably
XX CC is a chimeric oligonucleotide. The antisense compound is useful for
XX CC treating a disease or condition associated with VCC-1, such as diabetes,
XX CC an immunological disorder, a cardiovascular disorder, a neurological
XX CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
XX CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
XX CC antisense oligonucleotides may also be used for wound healing, for
XX CC healing of bone fractures and cartilage damage, for regeneration of
XX CC tissues or organs, for treating periodontal diseases, for gut protection
XX CC or regeneration, for treatment of lung or liver fibrosis or for
XX CC management of atrial fibrillation. This sequence represents an antisense
XX CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
XX CC the invention.
XX SQ Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1176 CTTCTATGAGATGCC 1190
Db 16 CTTCTAGGAGATGCC 2

RESULT 2386
ADM41526
ID ADM41526 standard; DNA; 20 BP.
XX AC ADM41526;
XX XX
XX DT 03-JUN-2004 (first entry)
XX DE
XX DE Rice histone deacetylase OshDAC3 gene primer P2.
XX KW Rice; plant; histone deacetylase; enzyme; OshDAC3; transgenic; PCR;
XX KW primer; ss.
XX OS Oryza sativa.

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XX WO2004022735-A1.
XX PD 18-MAR-2004.
XX PF 23-DEC-2002; 2002WO-KR002414.
XX PR 05-SEP-2002; 2002KR-00053637.
XX PA (GREE-) GREENGENE BIOTECH INC.
XX PI Jang I, Park Y, Song S, Kim J, Hahn B;
XX PI WPI; 2004-257582/24.
XX DR
XX PT New protein OshDAC1, OshDAC2, or OshDAC3, having a function of histone
XX PT deacetylase (HDAC), useful for producing a plant with high growth rate.
XX PS Example 1; SEQ ID NO 9; 47pp; English.
XX CC The present sequence is that of PCR primer P2 for the rice histone
XX CC deacetylase OshDAC3 gene. Primers P2 and R2 ADM41527 were used in the PCR
XX CC amplification of OshDAC3 cDNA ADM41520 to generate a 249 bp probe
XX CC ADM41528. The probe was used to search for the corresponding gene in a
XX CC rice genome library. The invention provides a method for producing a
XX CC plant having a high growth rate. This involves transforming a monocot
XX CC plant, especially rice, barley, wheat or maize, with a recombinant
XX CC plasmid containing a gene ADM41518-ADM41520 encoding OshDAC1, OshDAC2 or
XX CC OshDAC3 ADM41530-ADM41532. OshDAC proteins change the structure of
XX CC chromatin to increase or decrease the expression of a foreign gene, so
XX CC that the expression level of OshDAC proteins can be controlled to produce
XX CC a plant having varied phenotypic characteristics. Plants can be produced
XX CC that have a high growth rate under stress conditions, such as drought and
XX CC cold, as well as under normal conditions.
XX SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 312 CAGCTCTGCACCAGA 326
Db 4 CAGCTATGCACCAGA 18

RESULT 2387
ADM14349/c
ID ADM14349 standard; DNA; 20 BP.
XX AC ADM14349;
XX XX
XX DT 01-JUL-2004 (first entry)
XX DE
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:536.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX XX
XX FT Key Location/Qualifiers
XX FT modified_base 1..20 /*tag= b
XX FT /mod_base= OTHER

```

```
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 536; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX anti-diabetic, immunomodulator, cardiant, neuroprotective,
XX anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX SQ Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 511 TACCTGGAGAGCTG 525
XX ||||| |||||
XX 20 TACCTGGAGAGCTG 6
XX
XX RESULT 2388
XX ADO13818/c
XX ID ADO13818 standard; DNA; 20 BP.
XX
XX AC ADO13818;
XX
XX 15-JUL-2004 (first entry)
XX
XX Microsatellite analysis primer #48.
XX
XX ss; antiarteriosclerotic; laminin A; mutation; diagnosis;
XX
```

```
KW progeroid disease; Hutchinson-Gilford Progeria Syndrome;
XX arteriosclerosis; atherosclerosis; primer; chromosome 1.
XX
XX OS Homo sapiens.
XX
XX WO2004035753-A2.
XX
XX 29-APR-2004.
XX
XX 17-OCT-2003; 2003WO-US033058.
XX
XX 18-OCT-2002; 2002US-0419541P.
XX 14-APR-2003; 2003US-0463084P.
XX
XX (PROG-) PROGERIA RES FOUND INC.
XX (NYME-) NEW YORK STATE OFFICE MENTAL HEALTH.
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Eriksson MBH, Collins FS, Gordon LB, Brown TW;
XX WPI; 2004-348447/32.
XX
XX Detecting a biological condition associated with a dominant laminin A
XX (LMNA) mutation, useful for diagnosing, preventing or treating a
XX progeroid disease that is Hutchinson-Gilford Progeria Syndrome, and/or
XX arteriosclerosis.
XX
XX Example 1; SEQ ID NO 55; 85pp; English.
XX
XX The invention relates to a method of detecting a biological condition
XX associated with a dominant laminin A (LMNA) mutation in a subject
XX comprising determining whether a subject has mutation in LMNA, and where
XX the mutation comprises a variant nucleic acid sequence in or
XX corresponding to codon 608, 644, 145, 471, 527 or 269 of human LMNA, or
XX two or more mutations. The methods and compositions of the present
XX invention are useful for the diagnosis, prevention and/or treatment of
XX diseases or conditions associated with the mutation of LMNA, such as
XX progeroid disease that is Hutchinson-Gilford Progeria Syndrome, or
XX arteriosclerosis or atherosclerosis. This sequence corresponds to a
XX primer used in a microsatellite analysis of chromosome 1q21.3-23.1
XX containing the laminin A gene.
XX
XX SQ Sequence 20 BP; 7 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1197 CCGTCCCTCTTTCC 1211
XX ||||| |||||
XX 15 CCGTCCCTCTTTCC 1
XX
XX Db
XX
XX RESULT 2389
XX ADO54290
XX ID ADO54290 standard; DNA; 20 BP.
XX
XX AC ADO54290;
XX
XX 15-JUL-2004 (first entry)
XX
XX Farnesoid X receptor gene expression inhibitory oligo #1663.
XX
XX ss; anti-diabetic; immunosuppressive; cardiovascular; antilipemic;
XX antiarteriosclerotic; hepatotropic; litholytic; anorectic;
XX neuroprotective; vasotropic; antisense; gene therapy;
XX Farnesoid X receptor; diabetes; immunological disorder;
XX cardiovascular disorder; dyslipidemia; atherosclerosis;
XX high density lipoprotein; low density lipoprotein; hypercholesterolemia;
XX gallstones; hypertriglyceridemia; obesity; neurological disorder;
XX ischemia; reperfusion; diagnostics; prophylaxis.
XX
XX OS Homo sapiens.
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XX PN WO2004030750-A1.
XX PD 15-APR-2004.
XX PF 25-SEP-2003; 2003WO-US030353.
XX PR 25-SEP-2002; 2002US-0413588P.
XX PA (PHAA ) PHARMACIA CORP.
XX PT Kane CD;
XX WPI; 2004-347928/32.
XX New antisense oligonucleotides useful for modulating expression of
XX Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
XX e.g. diabetes, immunological disorders, cardiovascular disorders,
XX gallstones or obesity.
XX Claim 4; SEQ ID NO 1663; 150pp; English.
XX The invention relates to an antisense compound 8-30 nucleobases in length
XX targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
XX where the antisense compound specifically hybridizes with and inhibits
XX the expression of FXR. The composition and methods are useful for
XX inhibiting the expression of FXR (Farnesoid X receptor) in cells or
XX tissues, or for treating diseases or conditions associated with FXR, such
XX as diabetes, immunological disorders, cardiovascular disorders, e.g.
XX dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
XX lipoprotein), elevated LDL (low density lipoprotein) or
XX hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
XX neurological disorders, or ischemia/reperfusion injury. In addition, the
XX composition is used for diagnostics, prophylaxis, or as research reagents
XX or kits. This sequence corresponds to an antisense oligonucleotide of the
XX invention.
XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1661 CCCCTCACAGGCAG 1675
Db 1 CCCCTCACAGGTCAG 15

RESULT 2390
AD052403
ID AD052403 standard; DNA; 20 BP.
XX AC AD052403;
XX 12-AUG-2004 (first entry)
XX Human BRCA2 region transcription unit CG005 antisense oligonucleotide #8.
XX Human; BRCA2 region transcription unit CG005; ss;
XX antisense oligonucleotide; phosphorothioate linkage;
XX 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
XX hyperproliferative disorder; cancer; cytostatic.
XX Homo sapiens.
XX US2004097442-A1.
XX 20-MAY-2004.
XX 16-NOV-2002; 2002US-00298354.
XX 16-NOV-2002; 2002US-00298354.

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PA (ISIS-) ISIS PHARM INC.
XX Dobie KW;
XX WPI; 2004-389185/36.
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
XX encoding BRCA2 region transcription unit CG005, useful for treating
XX diseases hyperproliferative disorders.
XX Example 15; SEQ ID NO 18; 37pp; English.
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding the human BRCA2 region transcription unit CG005 polypeptide. The
XX compound is an antisense oligonucleotide that specifically hybridizes
XX with the nucleic acid and inhibits expression of the polypeptide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage i.e. a phosphorothioate linkage, at least one modified sugar
XX moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
XX modified nucleobase comprising a 5-methylcytosine. The antisense
XX compounds are useful for modulating the expression of the human BRCA2
XX region transcription unit CG005 polypeptide and in preparation of a
XX composition for treating hyperproliferative disorders, e.g. cancer. This
XX sequence represents an antisense oligonucleotide targeted to DNA encoding
XX the human BRCA2 region transcription unit CG005 polypeptide of the
XX invention.
XX Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 526 ACCCTCAATAGCCCC 540
Db 6 ACCCTCAATAGCCCC 20

RESULT 2391
ADP76527/c
ID ADP76527 standard; DNA; 20 BP.
XX AC ADP76527;
XX 12-AUG-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide #326.
XX GFAT; Antidiabetic; Cardiant;
XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
XX Synthetic.
XX Key Location/Qualifiers
XX modified_base 1..4
XX /tag= a
XX /mod_base= other
XX /note= "2-methoxyethyl wing"
XX modified_base 17..20
XX /tag= b
XX /mod_base= other
XX /note= "2-methoxyethyl wing"
XX WO2004035763-A2.
XX 29-APR-2004.
XX 02-OCT-2003; 2003WO-US033332.
XX 17-OCT-2002; 2002US-0419268P.
XX (PHAA ) PHARMACIA CORP.

```

XX Broschat KO, Crosby SD;  
 XX WPI; 2004-348453/32.  
 DR  
 XX New compounds, particularly antisense oligonucleotides targeted to a  
 PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase  
 PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,  
 PT ischemia/reperfusion injury.  
 XX  
 XX Claim 4; SEQ ID NO 326; 175pp; English.  
 PS  
 XX The present invention relates to a compound which specifically hybridizes  
 XX with a nucleic acid molecule encoding GFAT, and inhibits the expression  
 CC of GFAT. Specifically claimed are antisense oligonucleotides capable of  
 CC modulating the expression of GFAT, and which comprise any of the 3063  
 CC sequences of 20 base pairs, given in the specification. The compound,  
 CC composition and methods are useful for treating a disease or condition  
 CC associated with GFAT, such as a disease or condition, e.g. diabetes, a  
 CC cardiovascular or neurological disorder, ischemia/reperfusion injury.  
 CC They are also useful in research and diagnostics for modulating the  
 CC expression of GFAT. The present sequence represents a chimeric  
 CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these  
 CC oligonucleotides inhibit human GFAT expression.  
 XX  
 XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 131 GGATGAAGAGATCA 145  
 Db |||||  
 16 GGATGAAGAGATTCA 2  
 RESULT 2392  
 ADP10952  
 ID ADP10952 standard; DNA; 20 BP.  
 XX  
 XX ADP10952;  
 AC  
 XX 12-AUG-2004 (first entry)  
 DT  
 XX Set 1 left PCR primer for marker probe #297.  
 DE  
 XX transplant rejection; immune system; rheumatoid arthritis; lupus;  
 KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO2004042346-A2.  
 FN  
 XX 21-MAY-2004.  
 PD  
 XX 24-APR-2003; 2003WO-US012946.  
 PF  
 XX 24-APR-2002; 2002US-00131831.  
 PR  
 XX 20-DEC-2002; 2002US-00325899.  
 XX  
 XX (EXPR-) EXPRESSION DIAGNOSTICS INC.  
 PA  
 XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;  
 PI Rosenberg S;  
 PI  
 XX WPI; 2004-400724/37.  
 DR  
 XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,  
 PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant  
 PT rejection, in an individual, comprises detecting the expression level of  
 PT the genes.  
 PT  
 XX Claim 58; SEQ ID NO 961; 1762pp; English.  
 PS

XX The present invention relates to diagnosing or monitoring transplant  
 CC rejection, e.g. cardiac or kidney transplant rejection, in an individual  
 CC comprises detecting the expression level of one or more genes. The  
 CC methods, system and kits are useful in diagnosing or monitoring  
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic  
 CC islet, lung, bone marrow or stem cell transplant rejection,  
 CC xenotransplant rejection or mechanical organ replacement rejection, in an  
 CC individual. The method is also useful in assessing the immune status of  
 CC an individual. The methods are also useful in diagnosing and monitoring  
 CC diseases that involve the immune system, e.g. rheumatoid arthritis,  
 CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or  
 CC viral, bacterial or fungal infection. The present sequence represents a  
 CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring  
 CC of allograft rejection and other disorders.  
 XX  
 XX Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.4; DB 1; Length 20;  
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 822 GAAGTCCCTCACCT 836  
 Db |||||  
 1 GAAGCCCCCTCACCT 15  
 RESULT 2393  
 ADP12224  
 ID ADP12224 standard; DNA; 20 BP.  
 XX  
 XX ADP12224;  
 AC  
 XX 12-AUG-2004 (first entry)  
 DT  
 XX Tagman probe set 2 #82.  
 DE  
 XX transplant rejection; immune system; rheumatoid arthritis; lupus;  
 KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO2004042346-A2.  
 FN  
 XX 21-MAY-2004.  
 PD  
 XX 24-APR-2003; 2003WO-US012946.  
 PF  
 XX 24-APR-2002; 2002US-00131831.  
 PR  
 XX 20-DEC-2002; 2002US-00325899.  
 XX  
 XX (EXPR-) EXPRESSION DIAGNOSTICS INC.  
 PA  
 XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;  
 PI Rosenberg S;  
 PI  
 XX WPI; 2004-400724/37.  
 DR  
 XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,  
 PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant  
 PT rejection, in an individual, comprises detecting the expression level of  
 PT the genes.  
 PT  
 XX Claim 58; SEQ ID NO 2233; 1762pp; English.  
 PS  
 XX The present invention relates to diagnosing or monitoring transplant  
 CC rejection, e.g. cardiac or kidney transplant rejection, in an individual  
 CC comprises detecting the expression level of one or more genes. The  
 CC methods, system and kits are useful in diagnosing or monitoring  
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic  
 CC islet, lung, bone marrow or stem cell transplant rejection,  
 CC xenotransplant rejection or mechanical organ replacement rejection, in an  
 CC individual. The method is also useful in assessing the immune status of  
 CC

CC an individual. The methods are also useful in diagnosing and monitoring  
CC diseases that involve the immune system, e.g. rheumatoid arthritis,  
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or  
CC viral, bacterial or fungal infection. The present sequence represents a  
CC probe for a 50 mer oligonucleotide marker for diagnosis and monitoring of  
CC allograft rejection and other disorders.

XX  
SQ Sequence 20 BP; 2 A; 7 C; 8 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGCGCCCGCGGC 90  
|||||  
Db 6 GGAGAGCGCCCGCGGC 20

RESULT 2394  
ADP43749  
ID ADP43749 standard; DNA; 20 BP.  
XX  
AC ADP43749;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Human fibrillarin antisense oligonucleotide, ISIS 172821.  
XX  
KW Fibrillarin; FBL; FIB; FIB1; FLRN; 34-kD nucleolar scleroderma antigen;  
KW hyperproliferative disorder; cancer; human; antisense;  
KW phosphorothioate backbone; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.

XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone in which all cytidine  
FT residues are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) bases"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) bases"

XX  
FN US2004102403-A1.  
XX  
PD 27-MAY-2004.  
XX  
PF 21-NOV-2002; 2002US-00304111.  
XX  
PR 21-NOV-2002; 2002US-00304111.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Dean NM, Dobie KW;  
XX  
DR WPI; 2004-399733/37.  
XX  
PT New compound targeted to a nucleic acid molecule encoding fibrillarin,  
PT useful in diagnosing and treating hyperproliferative disorder.

XX  
PS Example 15; SEQ ID NO 24; 37pp; English.  
XX  
CC The invention relates to compounds, compositions and methods for  
CC modulating the expression of fibrillarin (also called FBL, FIB, FIB1,  
CC FLRN and 34-kD nucleolar scleroderma antigen). The composition comprise  
CC antisense oligonucleotides targeted to fibrillarin. The compound and

CC methods are useful in diagnosing and treating hyperproliferative  
CC disorders e.g., cancer. The present sequence is an antisense  
CC oligonucleotide targeted to human fibrillarin DNA. This sequence is used  
CC to illustrate the method of the invention.

XX  
SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 182 GCATAGACAAGACCA 196  
|||||  
Db 6 GCATAGACTAGACCA 20

RESULT 2395  
ADP27173  
ID ADP27173 standard; DNA; 20 BP.  
XX  
AC ADP27173;  
XX  
DT 26-AUG-2004 (first entry)  
XX  
DE Rat matrix metalloproteinase 11 DNA antisense oligonucleotide #4.  
XX  
KW Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;  
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;  
KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.  
XX  
OS Rattus norvegicus.  
XX  
FN US2004110152-A1.  
XX  
PD 10-JUN-2004.  
XX  
PF 10-DEC-2002; 2002US-00316755.  
XX  
PR 10-DEC-2002; 2002US-00316755.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Baker BF, Cowser LM;  
XX  
DR WPI; 2004-440341/41.  
XX

XX New oligonucleotide compound that inhibits expression of matrix  
PT metalloproteinase 11, useful for preparing a composition for treating  
PT hyperproliferative disorder, e.g., cancer.  
XX  
PS Example 16; SEQ ID NO 99; 76pp; English.  
XX  
CC The invention relates to a compound targeted to a nucleic acid molecule  
CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound  
CC is an antisense oligonucleotide that specifically hybridises with the  
CC nucleic acid and inhibits expression of the polypeptide. The antisense  
CC oligonucleotide comprises at least one modified internucleoside linkage  
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,  
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified  
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are  
CC useful for modulating the expression of the MMP11 polypeptide and in  
CC preparation of a composition for treating hyperproliferative disorders,  
CC e.g. cancer. This sequence represents an antisense oligonucleotide  
CC targeted to DNA encoding the rat MMP11 polypeptide of the invention.

XX  
SQ Sequence 20 BP; 2 A; 9 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1040 GCCTGGCGCCGAGCCA 1054  
|||||

```
Db      1 GCCTGGCCCGGCCA 15
RESULT 2396
ADP27304/C
ID ADP27304 standard; DNA; 20 BP.
XX
XX
AC ADP27304;
XX
XX
DT 26-AUG-2004 (first entry)
XX
DE Rat MMP11 DNA antisense oligonucleotide target region #2.
XX
XX Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
XX Rattus norvegicus.
OS
XX
XX US2004110152-A1.
XX
XX
XX 10-JUN-2004.
XX
XX 10-DEC-2002; 2002US-00316755.
XX
XX 10-DEC-2002; 2002US-00316755.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM;
PI
XX WPI; 2004-440341/41.
XX
XX New oligonucleotide compound that inhibits expression of matrix
PT metalloproteinase 11, useful for preparing a composition for treating
PT hyperproliferative disorder, e.g., cancer.
XX
XX Example 16; SEQ ID NO 230; 76pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
XX is an antisense oligonucleotide that specifically hybridizes with the
XX nucleic acid and inhibits expression of the polypeptide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage
XX i.e. a phosphorothioate linkage, at least one modified sugar moiety,
XX preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
XX nucleobase comprising a 5-methylcytosine. The antisense compounds are
XX useful for modulating the expression of the MMP11 polypeptide and in
XX preparation of a composition for treating hyperproliferative disorders,
XX e.g. cancer. This sequence represents a rat MMP11 DNA antisense
XX oligonucleotide target region of the invention.
XX
XX Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Qy 1040 GCCTGGCCCGGCCA 1054
XX Db 20 GCCTGGCCCGGCCA 6
XX
RESULT 2397
ADP19918/C
ID ADP19918 standard; DNA; 20 BP.
XX
XX
AC ADP19918;
XX
XX
DT 26-AUG-2004 (first entry)
XX
DE Human ABCC2 DNA antisense oligonucleotide #34.
XX
```

```
KW Human; ABCC2; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; drug clearance;
XX ATP-binding cassette subfamily C.
XX
XX Homo sapiens.
XX
XX US2004110699-A1.
XX
XX 10-JUN-2004.
XX
XX 10-DEC-2002; 2002US-00316389.
XX
XX 10-DEC-2002; 2002US-00316389.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
PI
XX WPI; 2004-440379/41.
XX
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
XX encoding ATP-binding cassette C2 (ABCC2), useful for treating disease or
XX condition that affects drug clearance.
XX
XX Example 15; SEQ ID NO 45; 54pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding the human ATP-binding cassette subfamily C (ABCC2) polypeptide.
XX The compound is an antisense oligonucleotide that specifically hybridizes
XX with the nucleic acid and inhibits expression of the polypeptide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage i.e. a phosphorothioate linkage, at least one modified sugar
XX moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
XX modified nucleobase comprising a 5-methylcytosine. The antisense
XX compounds are useful for modulating the expression of the human ABCC2
XX polypeptide and in preparation of a composition for treating disorders
XX associated with ABCC2, such as diseases or conditions that affect drug
XX clearance. This sequence represents DNA encoding the human ABCC2
XX polypeptide of the invention. This sequence represents an antisense
XX oligonucleotide targeted to human ABCC2 DNA of the invention.
XX
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Qy 1613 AAGCCACAGACCGAG 1627
XX Db 19 AAGCCACAGACCGAG 5
XX
RESULT 2398
ADP85681
ID ADP85681 standard; DNA; 20 BP.
XX
XX
AC ADP85681;
XX
XX 26-AUG-2004 (first entry)
XX
XX Human Talin antisense oligonucleotide, ISIS #109125.
XX
XX Antisense; Talin; muscular disorder; haematologic disorder;
KW cardiac disorder; hyperproliferative disorder; cancer; human;
KW phosphorothioate; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1.20
XX /*tag= b
XX /mod_base= OTHER
XX
```

```

FT FT /note= "Phosphorothioate backbone where all cytidine
FT FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX XX
FN US2004110705-A1.
XX XX
PD 10-JUN-2004.
XX XX
PF 11-SEP-2003; 2003US-00415463.
XX XX
PR 30-OCT-2000; 2000US-00702251.
PR 30-OCT-2001; 2001WO-US047585.
XX XX
PA (BENN/) BENNETT C F.
PA (COWS/) COWSERT L M.
XX XX
PI Bennett CF, Cowsert LM;
XX WPI; 2004-440384/41.
XX XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding talin, useful for treating muscular, cardiac,
PT hematologic, or hyperproliferative disorders.
XX XX
PS Claim 3; SEQ ID NO 26; 48pp; English.
XX XX
CC The invention relates to novel antisense compounds targeted to a nucleic
CC acid molecule encoding human Talin to and inhibit its expression. The
CC invention is useful for treating a disease or condition associated with
CC Talin such as a disease or condition e.g. muscular, haematologic, cardiac
CC or hyperproliferative disorder such as cancer. The present sequence is an
CC antisense oligonucleotide targeted to human Talin DNA.
XX XX
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1537 AAGGAGGCCAGCCTT 1551
DB 1 AAGGAAGCCAGCCTT 15
RESULT 2399
ADP21189/c
ID ADP21189 standard; DNA; 20 BP.
XX XX
AC ADP21189;
XX XX
DT 09-SEP-2004 (first entry)
XX XX
DE Heavy chain variable region (VH) 5' PCR primer hVH4a.1, SEQ:4.
XX XX
KW Human; antibody; immunoglobulin; antigen-specific lymphocyte;
KW B-lymphocyte; T-lymphocyte; microwell chip; detection; isolation;
KW selection; antigen-specific receptor; monoclonal antibody;
KW T-cell receptor; immunotherapy; gene therapy; variable region;
KW heavy chain; VH; PCR; primer; ss.
XX XX
OS Homo sapiens.
OS Synthetic.
XX XX
FN WO2004051266-A1.
XX XX
PD 17-JUN-2004.

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XX 30-SEP-2003; 2003WO-JP012500.
XX 14-NOV-2002; 2002JP-00331031.
XX 29-NOV-2002; 2002JP-00346728.
XX (MURA/) MURAGUCHI A.
XX (KISH/) KISHI H.
XX (TAMI/) TAMIYA E.
XX (SUZU/) SUZUKI M.
XX Muraguchi A, Kishi H, Tamiya E, Suzuki M;
XX WPI; 2004-461173/43.
XX XX
XX Microwell array chip for detecting antigen specific lymphocyte, has shape
XX and dimension to store lymphocyte in microwell.
XX Example 5; SEQ ID NO 4; 92pp; Japanese.
XX XX
CC The invention relates to a microwell array chip for detecting a single
CC antigen-specific lymphocyte. Each microwell of the chip has the shape and
CC size to accommodate one lymphocyte only. The lymphocyte may be a B or a T
CC lymphocyte. The invention also relates to methods for detecting,
CC isolating and selecting an antigen-specific lymphocyte; a method of
CC cloning a gene encoding an antigen-specific receptor (e.g., an
CC immunoglobulin or a T-cell receptor) from an antigen-specific lymphocyte
CC via reverse transcription-PCR (RT-PCR); a method of manufacturing a
CC monoclonal antibody using an antigen-specific immunoglobulin gene cloned
CC using the cloning method of the invention; and a method of manufacturing
CC gene therapy material using an antigen-specific T-cell receptor gene
CC cloned using the cloning method. The method of the invention is useful
CC for the efficient detection of a single antigen-specific lymphocyte,
CC genes from which may be isolated and cloned for use in various
CC immunotherapy and gene therapy methods. Sequences ADP21186-ADP21233
CC represent PCR primers used to clone the heavy and light chain variable
CC regions (ADP21234 and ADP21236) of an antibody produced by a single human
CC B lymphocyte.
XX XX
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 1 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 82.4%; Pred. No. 1.2e+03;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 951 CTGCCACCGCAGAGG 967
DB 18 CTGCCACCGCAGAGG 2
RESULT 2400
ADP68849
ID ADP68849 standard; DNA; 20 BP.
XX XX
AC ADP68849;
XX XX
DT 09-SEP-2004 (first entry)
XX XX
DE Rice histone deacetylase 3 primer seqid 9.
XX XX
KW histone deacetylase; HDAC; OsHDAC1; OsHDAC2; OsHDAC3; plant; growth rate;
KW stress condition; drought; cold; rice; histone deacetylase 3; HDAC3; PCR;
KW primer; ss.
XX XX
OS Oryza sativa.
XX XX
PN US2004123348-A1.
XX XX
PD 24-JUN-2004.
XX XX
PF 18-DEC-2002; 2002US-00321732.
XX XX
PD 18-DEC-2002; 2002US-00321732.

```

XX (JANG/) JANG I.  
PA (PAHK/) PAHK Y.  
PA (SONG/) SONG S.  
PA (KIM/) KIM J.  
PA (NAHM/) NAHM B.  
XX  
PI Jang I, Pakh Y, Song S, Kim J, Nahm B;  
XX WPI; 2004-479812/45.  
XX  
PT New histone deacetylase (HDAC) proteins, OSHDAC1, OSHDAC2 and OSHDAC3,  
PT useful for developing a plant body which can be maintained at a high  
PT growth rate even under stress conditions e.g., drought.  
XX  
PS Example 1; SEQ ID NO 9; 12pp; English.  
XX  
CC The invention describes histone deacetylase (HDAC) proteins OSHDAC1,  
CC OSHDAC2 and OSHDAC3 comprising amino acid sequences of 518, 498 and 510  
CC amino acids having a function of histone deacetylase. Also described are:  
CC a gene coding for OSHDAC1 above or OSHDAC1 gene coding for OSHDAC1 above  
CC comprising an sequence of SEQ ID NO: 1; a gene coding for OSHDAC2 above  
CC or OSHDAC2 gene coding for OSHDAC2 above comprising a sequence of SEQ ID  
CC NO: 2; a gene coding for OSHDAC3 above or OSHDAC3 gene coding for OSHDAC3  
CC comprising an amino acid sequence of SEQ ID NO: 3; and a method for  
CC producing a plant having a high growth rate. The proteins are useful for  
CC developing a plant body which can be maintained at a high growth rate  
CC even under stress conditions including drought, cold, etc, as well as  
CC under normal conditions. This sequence represents a primer used in the  
CC isolation of a rice histone deacetylase 3 (HDAC3) polynucleotide for use  
CC as a probe in the recognition of HDAC sequences.  
XX  
SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 312 CAGCTCTGCACCGA 326  
DB 4 CAGCTATGCACCGA 18  
  
RESULT 2401  
ADP43632/C  
ID ADP43632 standard; DNA; 20 BP.  
XX  
AC ADP43632;  
XX  
DT 09-SEP-2004 (first entry)  
XX  
DE Human MAD1-like 1 target sequence ISIS 191885.  
XX  
KW ss; human; MAD1-like 1; hyperproliferative disorder; cancer.  
XX  
OS Homo sapiens.  
XX  
PN US2004115650-A1.  
XX  
PD 17-JUN-2004.  
XX  
PF 12-DEC-2002; 2002US-00319908.  
XX  
PR 12-DEC-2002; 2002US-00319908.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Dobie KW, Jain R;  
XX  
PT WPI; 2004-449387/42.  
XX  
PS New oligonucleotide compound that inhibits expression of MAD1-like 1,  
PT useful for preparing a composition for treating hyperproliferative

PT disorder, e.g., cancer.  
XX  
PS Example 15; SEQ ID NO 131; 206pp; English.  
XX  
CC The invention relates to a new compound targeted to a nucleic acid  
CC encoding MAD1-like 1 which specifically hybridises with the nucleic acid  
CC encoding MAD1-like 1 and inhibits expression of MAD1-like 1. The  
CC oligonucleotide compound is useful for preparing a composition for  
CC treating hyperproliferative disorder, e.g. cancer. The present sequence  
CC represents a human MAD1-like 1 target sequence.  
XX  
SQ Sequence 20 BP; 1 A; 7 C; 8 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 1628 GCCCCAGCAGGCAGC 1642  
DB 15 GCCCCAGCAGGAAGC 1  
  
RESULT 2402  
ADP43570  
ID ADP43570 standard; DNA; 20 BP.  
XX  
AC ADP43570;  
XX  
DT 09-SEP-2004 (first entry)  
XX  
DE Human MAD1-like 1 antisense oligonucleotide ISIS 275667.  
XX  
KW ss; human; antisense; MAD1-like 1; hyperproliferative disorder; cancer.  
XX  
OS Homo sapiens.  
XX  
PN US2004115650-A1.  
XX  
PD 17-JUN-2004.  
XX  
PF 12-DEC-2002; 2002US-00319908.  
XX  
PR 12-DEC-2002; 2002US-00319908.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Dobie KW, Jain R;  
XX  
PT WPI; 2004-449387/42.  
XX  
PS New oligonucleotide compound that inhibits expression of MAD1-like 1,  
PT useful for preparing a composition for treating hyperproliferative  
PT disorder, e.g., cancer.  
XX  
PS Example 15; SEQ ID NO 69; 206pp; English.  
XX  
CC The invention relates to a new compound targeted to a nucleic acid  
CC encoding MAD1-like 1 which specifically hybridises with the nucleic acid  
CC encoding MAD1-like 1 and inhibits expression of MAD1-like 1. The  
CC oligonucleotide compound is useful for preparing a composition for  
CC treating hyperproliferative disorder, e.g. cancer. The present sequence  
CC represents a human MAD1-like 1 antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 4 A; 8 C; 7 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 1628 GCCCCAGCAGGCAGC 1642  
DB 6 GCCCCAGCAGGAAGC 20

```
RESULT 2403
ADQ08031/c
ID ADQ08031 standard; DNA; 20 BP.
XX
XX AC ADQ08031;
XX
XX DT 23-SEP-2004 (first entry)
XX
XX DE Human beta-site APP-cleaving enzyme 2 DNA antisense oligonucleotide #9.
XX
XX KW Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide;
XX KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
XX KW 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Phosphorothioate backbone. All cytidines
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX PN US2004132681-Al.
XX
XX PD 08-JUL-2004.
XX
XX PF 16-SEP-2003; 2003US-00663452.
XX
XX PR 04-JUN-2002; 2002US-00163272.
XX
XX PA (DOBI/) DOBIE K W.
XX
XX PI Dobie KW;
XX
XX DR WPI; 2004-517033/49.
XX
XX PS New antisense compound, useful for treating diseases associated with
XX PT expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2
XX PT such as sporadic inclusion-body myositis and cancer.
XX
XX PS Claim 19; SEQ ID NO 19; 61pp; English.
XX
XX CC The invention relates to a compound targeted to a nucleic acid molecule
XX CC encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The
XX CC compound is an antisense oligonucleotide that specifically hybridises
XX CC with the nucleic acid and inhibits expression of the polypeptide. The
XX CC antisense oligonucleotide comprises at least one modified internucleoside
XX CC linkage i.e. a phosphorothioate linkage, at least one modified sugar
XX CC moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
XX CC modified nucleobase comprising a 5-methylcytosine. The antisense
XX CC compounds are useful for modulating the expression of the human beta-site
XX CC APP-cleaving enzyme 2 polypeptide and for treating diseases associated
XX CC with expression of beta-site APP-cleaving enzyme 2 such as sporadic
XX CC inclusion-body myositis and cancer. This sequence represents an antisense
XX CC oligonucleotide targeted to DNA encoding the human beta-site APP-cleaving
XX CC enzyme 2 polypeptide of the invention.
XX
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 510 CTACCTGGAGAGCT 524
Db |||||
15 CTACCTGGAGATGCT 1

RESULT 2404
ADQ08108
ID ADQ08108 standard; DNA; 20 BP.
XX
XX AC ADQ08108;
XX
XX DT 23-SEP-2004 (first entry)
XX
XX DE Human beta-site APP-cleaving enzyme 2 DNA target region #8.
XX
XX KW Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide;
XX KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
XX KW 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Phosphorothioate backbone. All cytidines
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX PN US2004132681-Al.
XX
XX PD 08-JUL-2004.
XX
XX PF 16-SEP-2003; 2003US-00663452.
XX
XX PR 04-JUN-2002; 2002US-00163272.
XX
XX PA (DOBI/) DOBIE K W.
XX
XX PI Dobie KW;
XX
XX DR WPI; 2004-517033/49.
XX
XX PS New antisense compound, useful for treating diseases associated with
XX PT expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2
XX PT such as sporadic inclusion-body myositis and cancer.
XX
XX PS Example 15; SEQ ID NO 96; 61pp; English.
XX
XX CC The invention relates to a compound targeted to a nucleic acid molecule
XX CC encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The
XX CC compound is an antisense oligonucleotide that specifically hybridises
XX CC with the nucleic acid and inhibits expression of the polypeptide. The
XX CC antisense oligonucleotide comprises at least one modified internucleoside
XX CC linkage i.e. a phosphorothioate linkage, at least one modified sugar
XX CC moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
XX CC modified nucleobase comprising a 5-methylcytosine. The antisense
XX CC compounds are useful for modulating the expression of the human beta-site
XX CC APP-cleaving enzyme 2 polypeptide and for treating diseases associated
XX CC with expression of beta-site APP-cleaving enzyme 2 such as sporadic
XX CC inclusion-body myositis and cancer. This sequence represents a human beta
XX CC site APP-cleaving enzyme 2 DNA antisense oligonucleotide target region
XX CC of the invention.
XX
XX SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
```

Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 510 CTACCTGGAGAGCT 524  
|||||  
Db 6 CTACCTGGAGAGCT 20

RESULT 2405  
ADP98043/c  
ID ADP98043 standard; DNA; 20 BP.  
XX  
AC ADP98043;  
XX  
DT 23-SEP-2004 (first entry)  
XX  
DE C. albicans specific gene, CAYB081C, identification primer A.  
XX  
KW Diploid fungal cell; allele; gene disruption cassette;  
KW promoter replacement fragment; antifungal; fungicide; gene therapy;  
KW infection; Candida albicans; identification; primer; ss.  
XX  
OS Candida albicans.  
OS Unidentified.  
XX  
XX WO2004056965-A2.  
PN  
XX  
XX 08-JUL-2004.  
PD  
XX  
XX 19-DEC-2003; 2003WO-US040618.  
PF  
XX  
XX 19-DEC-2002; 2002US-0434832P.  
PR  
XX  
PA (ELIT-) ELITRA PHARM INC.  
PA (ELIT-) ELITRA CANADA LTD.  
XX  
XX Roemer T, Jiang B, Boone C, Bussey H;  
PI WPI; 2004-500296/47.  
XX  
XX  
DR  
XX  
PT Constructing a strain of diploid fungal cells in which both alleles of a  
PT gene are modified comprises modifying the alleles of a gene in the fungal  
PT cells by recombination using a gene disruption cassette and a promoter  
PT replacement fragment.  
XX  
XX Claim 36; SEQ ID NO 4148; 163pp; English.

The invention relates to a novel method for constructing a strain of  
diploid fungal cells in which both alleles of a gene are modified. The  
method comprises modifying the alleles of a gene in diploid fungal cells  
by recombination using a gene disruption cassette and a promoter  
replacement fragment. The invention further comprises: assembling a  
collection of diploid fungal cells each of which comprises modified  
alleles of a different gene; a strain of diploid fungal cells comprising  
modified alleles of a gene, where the first allele of the gene is  
inactivated by a gene disruption cassette comprising a nucleotide  
sequence encoding an expressible selectable marker; and the expression of  
the second allele of the gene is regulated by a heterologous promoter  
that is operably linked to the coding region of the second allele of the  
gene, and where the gene encodes the polypeptide mentioned above; a  
collection of diploid fungal strains comprising the diploid strains cited  
above, where substantially all the different genes that encode the above  
amino acid sequences are modified and are present in different diploid  
strains in the collection; a nucleic acid molecule microarray comprising  
nucleic acid molecules, where each nucleic acid molecule comprises a  
nucleotide sequence that is hybridizable to a target nucleotide sequence  
comprising any of the 310 nucleotide sequences listed in the  
specification (ADP98516-ADP98825); identifying a gene that is essential  
to the survival or growth of a fungus, that contributes to the virulence  
and/or pathogenicity of a fungus, or that contributes to the resistance  
of a diploid fungus to an antifungal agent; identifying an antifungal

agent that inhibits the growth of a diploid fungus, or a therapeutic  
level for treatment of a mammalian disease; correlating changes in the  
proliferation of a diploid fungal cell; a purified or isolated nucleic  
acid molecule comprising a nucleotide sequence encoding a gene product  
required for proliferation of Candida albicans, where the gene product  
consists of any of the above-mentioned amino acid sequences; a vector  
comprising a promoter operably linked to the nucleic acid molecule cited  
above; a host cell containing the vector; a purified or isolated  
polypeptide comprising any of the 61 amino acid sequences given in the  
specification (ADP96718-ADP96778); a fusion protein comprising a fragment  
of a first polypeptide fused to a second polypeptide, the fragment  
consisting of at least 6 consecutive residues of any of ADP98826-ADP99135  
; producing a polypeptide; identifying a compound which modulates the  
activity of a gene product encoded by a nucleic acid comprising any of  
ADP98516-ADP98825; eliciting an immune response in an animal; a strain of  
Candida albicans, where a first allele of a gene comprising any of  
ADP98516-ADP98825 is inactive and a second allele of the gene is under  
the control of a heterologous promoter; identifying a compound or binding  
partner that binds to the polypeptide comprising any of ADP98826-  
ADP99135, or its fragment; identifying a compound having the ability to  
inhibit growth or proliferation of Candida albicans; inhibiting growth or  
proliferation of Candida albicans cells; manufacturing an antimycotic  
compound; treating an infection of a subject by Candida albicans;  
preventing or containing contamination of an object by Candida albicans,  
or for preventing or inhibiting formation on a surface of a biofilm  
comprising Candida albicans; a pharmaceutical composition comprising a  
therapeutic amount of an agent which reduces the activity or level of a  
gene product encoded by a nucleic acid comprising any of ADP98516-  
ADP98825 in a pharmaceutical carrier; an antibody preparation which binds  
the polypeptide; methods for evaluating a compound against a target gene  
product encoded by any of ADP98516-ADP98825; identifying an antimycotic  
compound; a computer or a computer readable medium that comprises at  
least one of the nucleotide sequences mentioned in the specification or  
at least one amino acid sequence selected from ADP98826-ADP99135; a  
method assisted by a computer for identifying a putatively essential gene  
of a fungus; and a protein array comprising proteins, where at least one  
protein comprises an amino acid sequence or a portion of an amino acid  
sequence selected from ADP98516-ADP98825. The novel methods and  
compositions have fungicide activity. The compositions may be used in  
gene therapy. The composition and methods are useful for drug screening  
purposes or for diagnosing, preventing or treating infections associated  
with Candida albicans. These may also be used for constructing strains  
useful for identification and validation of gene products as effective  
targets for therapeutic intervention, for identifying and validating gene  
products as effective targets for therapeutic intervention, and for  
collecting identified essential genes. This polynucleotide sequence  
represents an identification primer used in the exemplification of the  
invention. NOTE: This sequence was downloaded from an electronic sequence  
listing provided on the WIPO website.

Sequence 20 BP; 9 A; 11 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 231 TGGTGGTGGTGGCGG 245  
|||||  
Db 15 TGGTGGTGGTGGTGG 1

RESULT 2406  
ABZ89410  
ID ABZ89410 standard; DNA; 20 BP.  
XX  
AC ABZ89410;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;



KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX

PS Disclosure; SEQ ID NO 4652; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 1.3e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1231 CAGCTACACTTCATCTTC 1248

DB 1 CAGTCAGACTTCATCTTC 18

RESULT 2407

ABD25640

ID ABD25640 standard; DNA; 20 BP.

XX ABD25640;

XX 29-JUL-2004 (first entry)

DE AI024215-derived oligonucleotide SEQ ID 4652.

XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiasthmatic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX

PS Claim 15; SEQ ID NO 4652; 763pp; English.

XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposcretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating or  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiasthmatic, antiinflammatory, antiasthmatic, is a  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX

SQ Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 1.3e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1231 CAGCTACACTTCATCTTC 1248

DB 1 CAGTCAGACTTCATCTTC 18

Search completed: November 2, 2004, 13:06:29  
Job time : 59 secs

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c 107	15.2	0.9	21	1	US-09-177-953-3	Sequence 3, Appl	180	14.8	0.8	21	1	US-09-377-497-35	Sequence 35, Appl
c 108	15.2	0.9	21	1	US-09-177-953-12	Sequence 12, Appl	181	14.8	0.8	21	1	US-09-657-472-7	Sequence 7, Appl
c 109	15.2	0.9	21	1	US-09-177-953-26	Sequence 26, Appl	182	14.8	0.8	21	1	US-09-657-472-136	Sequence 136, Appl
c 110	15.2	0.9	21	1	US-09-177-953-34	Sequence 34, Appl	183	14.8	0.8	21	1	US-09-657-472-2259	Sequence 2259, Appl
c 111	15.2	0.9	21	1	US-09-177-953-41	Sequence 41, Appl	c 184	14.8	0.8	22	1	US-08-802-468-10	Sequence 10, Appl
c 112	15.2	0.9	21	1	US-09-111-678-3	Sequence 3, Appl	185	14.8	0.8	22	1	US-09-033-936-6	Sequence 6, Appl
c 113	15.2	0.9	21	1	US-08-829-673A-128	Sequence 128, Appl	186	14.8	0.8	22	1	US-09-657-013-12	Sequence 12, Appl
c 114	15.2	0.9	21	1	US-09-287-175-3	Sequence 3, Appl	187	14.8	0.8	22	1	US-09-657-013-84	Sequence 84, Appl
c 115	15.2	0.9	21	1	US-09-287-175-6	Sequence 6, Appl	188	14.6	0.8	22	1	US-08-557-139-9	Sequence 9, Appl
c 116	15.2	0.9	21	1	US-09-135-202-18	Sequence 18, Appl	189	14.6	0.8	21	1	US-08-863-639A-52	Sequence 52, Appl
c 117	15.2	0.9	21	1	US-09-135-202-19	Sequence 19, Appl	c 190	14.6	0.8	21	1	US-08-863-639A-56	Sequence 56, Appl
c 118	15.2	0.9	21	1	US-09-349-659-3	Sequence 3, Appl	c 191	14.6	0.8	21	1	US-08-840-316-29	Sequence 29, Appl
c 119	15.2	0.9	21	1	US-08-802-331-23	Sequence 23, Appl	c 192	14.6	0.8	21	1	US-08-809-523-29	Sequence 29, Appl
c 120	15.2	0.9	21	1	US-08-802-331-24	Sequence 24, Appl	c 193	14.6	0.8	21	1	US-09-109-663-37	Sequence 37, Appl
c 121	15.2	0.9	21	1	US-09-389-283-18	Sequence 18, Appl	c 194	14.6	0.8	21	1	US-08-471-971-29	Sequence 29, Appl
c 122	15.2	0.9	21	1	US-09-389-283-19	Sequence 19, Appl	195	14.6	0.8	21	1	US-08-679-493A-134	Sequence 134, Appl
c 123	15.2	0.9	21	1	US-09-174-186-4	Sequence 4, Appl	196	14.6	0.8	21	1	US-08-679-493A-136	Sequence 136, Appl
c 124	15.2	0.9	21	1	US-09-306-278A-3	Sequence 3, Appl	197	14.6	0.8	21	1	US-08-679-493A-137	Sequence 137, Appl
c 125	15.2	0.9	21	1	US-10-318-628-3	Sequence 3, Appl	198	14.6	0.8	21	1	US-08-679-493A-138	Sequence 138, Appl
c 126	15.2	0.9	21	1	US-10-318-628-12	Sequence 12, Appl	199	14.6	0.8	21	1	US-08-679-493A-144	Sequence 144, Appl
c 127	15.2	0.9	21	1	US-10-318-628-26	Sequence 26, Appl	c 200	14.6	0.8	21	1	US-09-844-634-4	Sequence 4, Appl
c 128	15.2	0.9	21	1	US-10-318-628-34	Sequence 34, Appl	c 201	14.6	0.8	21	1	US-09-408-776-29	Sequence 29, Appl
c 129	15.2	0.9	21	1	US-10-318-628-41	Sequence 41, Appl	c 202	14.6	0.8	21	1	US-09-422-978-7806	Sequence 7806, Appl
c 130	15.2	0.9	21	1	US-10-290-587-3	Sequence 3, Appl	203	14.6	0.8	21	1	US-09-422-978-10136	Sequence 10136, Appl
c 131	15.2	0.9	21	1	US-09-754-066-13	Sequence 13, Appl	c 204	14.6	0.8	21	1	US-09-589-460-4	Sequence 4, Appl
c 132	15.2	0.9	21	1	US-09-657-472-1386	Sequence 1386, Appl	c 205	14.6	0.8	21	1	US-08-470-246-29	Sequence 29, Appl
c 133	15.2	0.9	21	1	US-10-029-598-48	Sequence 48, Appl	c 206	14.6	0.8	21	1	US-08-482-934A-25	Sequence 25, Appl
c 134	15.2	0.9	21	1	US-10-029-598-56	Sequence 56, Appl	c 207	14.6	0.8	21	1	US-08-316-765-29	Sequence 29, Appl
c 135	15.2	0.9	21	1	US-09-835-370-1	Sequence 1, Appl	c 208	14.6	0.8	21	1	US-08-983-605-282	Sequence 282, Appl
c 136	15.2	0.9	21	1	PCT-US91-05815-22	Sequence 22, Appl	c 209	14.6	0.8	21	1	US-09-657-472-1825	Sequence 1825, Appl
c 137	15.2	0.9	21	1	PCT-US95-05007-1	Sequence 1, Appl	c 210	14.6	0.8	21	1	US-09-724-475-29	Sequence 29, Appl
c 138	15.2	0.9	21	1	PCT-US95-06160-24	Sequence 24, Appl	c 211	14.6	0.8	21	1	US-10-006-611-7	Sequence 7, Appl
c 139	15.2	0.9	21	1	PCT-US95-06743-10	Sequence 10, Appl	c 212	14.6	0.8	21	1	PCT-US93-08849A-29	Sequence 29, Appl
c 140	15.2	0.9	21	1	PCT-US96-08757A-7	Sequence 7, Appl	c 213	14.6	0.8	21	1	PCT-US93-08849-29	Sequence 29, Appl
c 141	15.2	0.9	22	1	US-08-232-081B-10	Sequence 10, Appl	c 214	14.6	0.8	22	1	US-08-881-450A-9	Sequence 9, Appl
c 142	15.2	0.9	22	1	US-09-755-665-68	Sequence 68, Appl	c 215	14.6	0.8	22	1	US-09-792-024-368	Sequence 368, Appl
c 143	15.2	0.9	22	1	US-09-546-596A-19	Sequence 19, Appl	c 216	14.4	0.8	17	1	US-08-055-917-5	Sequence 5, Appl
c 144	15.2	0.9	22	1	US-08-117-363A-19	Sequence 19, Appl	c 217	14.4	0.8	17	1	US-08-095-068-5	Sequence 5, Appl
c 145	15.2	0.9	23	1	US-08-068-945A-25	Sequence 25, Appl	c 218	14.4	0.8	17	1	US-08-140-721A-5	Sequence 5, Appl
c 146	15.2	0.9	23	1	US-08-442-808-25	Sequence 25, Appl	c 219	14.4	0.8	17	1	US-08-619-790C-5	Sequence 5, Appl
c 147	15.2	0.9	23	1	US-08-653-740-18	Sequence 18, Appl	c 220	14.4	0.8	17	1	US-08-758-306-427	Sequence 427, Appl
c 148	15.2	0.9	23	1	US-08-463-090B-18	Sequence 18, Appl	c 221	14.4	0.8	17	1	US-07-785-565A-5	Sequence 5, Appl
c 149	15.2	0.9	23	1	US-09-073-594-18	Sequence 18, Appl	c 222	14.4	0.8	17	1	US-09-436-605-8	Sequence 8, Appl
c 150	15.2	0.9	23	1	US-09-275-925-18	Sequence 18, Appl	c 223	14.4	0.8	17	1	US-09-474-432B-505	Sequence 505, Appl
c 151	15.2	0.9	23	1	US-09-647-344A-3	Sequence 3, Appl	c 224	14.4	0.8	17	1	US-09-371-772B-6740	Sequence 6740, Appl
c 152	15	0.9	23	1	US-09-256-496-10	Sequence 10, Appl	c 225	14.4	0.8	17	1	US-09-476-387-504	Sequence 504, Appl
c 153	15	0.9	19	1	US-09-696-791-204	Sequence 204, Appl	c 226	14.4	0.8	17	1	US-09-827-998-543	Sequence 543, Appl
c 154	15	0.9	20	1	US-08-621-841-50	Sequence 50, Appl	c 227	14.4	0.8	17	1	US-09-827-998-545	Sequence 545, Appl
c 155	15	0.9	20	1	US-07-711-303-7	Sequence 7, Appl	c 228	14.4	0.8	18	1	US-09-205-144-19	Sequence 19, Appl
c 156	15	0.9	21	1	US-08-410-654B-29	Sequence 29, Appl	c 229	14.4	0.8	18	1	US-09-723-534-16	Sequence 16, Appl
c 157	15	0.9	21	1	US-08-474-851-29	Sequence 29, Appl	c 230	14.4	0.8	18	1	US-09-422-978-5066	Sequence 5066, Appl
c 158	15	0.9	21	1	US-08-481-560-29	Sequence 29, Appl	c 231	14.4	0.8	19	1	US-08-640-672-6	Sequence 6, Appl
c 159	15	0.9	21	1	US-09-657-472-1729	Sequence 1729, Appl	c 232	14.4	0.8	19	1	US-08-684-498A-6	Sequence 6, Appl
c 160	15	0.9	23	1	US-08-244-116B-39	Sequence 39, Appl	c 233	14.4	0.8	19	1	US-08-577-859A-6	Sequence 6, Appl
c 161	15	0.9	23	1	US-09-150-900-42	Sequence 42, Appl	c 234	14.4	0.8	19	1	US-08-846-020A-36	Sequence 36, Appl
c 162	15	0.9	23	1	US-09-449-218D-21	Sequence 21, Appl	c 235	14.4	0.8	19	1	US-08-846-020A-36	Sequence 36, Appl
c 163	15	0.9	23	1	US-09-668-529A-21	Sequence 21, Appl	c 236	14.4	0.8	19	1	US-09-177-953-9	Sequence 9, Appl
c 164	15	0.9	23	1	US-09-668-037A-21	Sequence 21, Appl	c 237	14.4	0.8	19	1	US-09-617-871-36	Sequence 36, Appl
c 165	15	0.9	23	1	US-09-761-962A-43	Sequence 43, Appl	c 238	14.4	0.8	19	1	US-10-318-628-9	Sequence 9, Appl
c 166	14.8	0.8	18	1	US-09-920-760-24	Sequence 24, Appl	c 239	14.4	0.8	19	1	US-09-696-791-344	Sequence 344, Appl
c 167	14.8	0.8	18	1	US-09-422-978-11527	Sequence 11527, Appl	c 240	14.4	0.8	20	1	US-07-940-2429A-6	Sequence 6, Appl
c 168	14.8	0.8	18	1	US-09-696-791-4270	Sequence 4270, Appl	c 241	14.4	0.8	20	1	US-07-932-379A-6	Sequence 6, Appl
c 169	14.8	0.8	18	1	US-09-696-791-4271	Sequence 4271, Appl	c 242	14.4	0.8	20	1	US-08-379-296-6	Sequence 6, Appl
c 170	14.8	0.8	18	1	US-09-696-791-4272	Sequence 4272, Appl	c 243	14.4	0.8	20	1	US-08-665-259-70	Sequence 70, Appl
c 171	14.8	0.8	19	1	US-09-696-791-205	Sequence 205, Appl	c 244	14.4	0.8	20	1	US-08-763-508-70	Sequence 70, Appl
c 172	14.8	0.8	19	1	US-09-696-791-585	Sequence 585, Appl	c 245	14.4	0.8	20	1	US-09-444-053-77	Sequence 77, Appl
c 173	14.8	0.8	19	1	US-09-696-791-1852	Sequence 1852, Appl	c 246	14.4	0.8	20	1	US-09-513-729B-14	Sequence 14, Appl
c 174	14.8	0.8	20	1	US-08-435-529-22	Sequence 22, Appl	c 247	14.4	0.8	20	1	US-09-907-843-21	Sequence 21, Appl
c 175	14.8	0.8	20	1	US-09-288-461-27	Sequence 27, Appl	c 248	14.4	0.8	20	1	US-09-898-361-105	Sequence 105, Appl
c 176	14.8	0.8	20	1	US-08-927-219-72	Sequence 72, Appl	c 249	14.4	0.8	20	1	US-09-033-936-8	Sequence 8, Appl
c 177	14.8	0.8	20	1	US-08-643-212-35	Sequence 35, Appl	c 250	14.4	0.8	21	1	US-09-657-472-2176	Sequence 2176, Appl
c 178	14.8	0.8	20	1	US-09-700-422-6	Sequence 6, Appl	c 251	14.4	0.8	21	1	US-09-593-344-4	Sequence 4, Appl
c 179	14.8	0.8	20	1	US-09-758-881-27	Sequence 27, Appl	c 252	14.4	0.8	21	1	US-09-380-836-58	Sequence 58, Appl

253	14.4	0.8	22	1	US-08-437-027-7	Sequence 7, Appli	326	14.2	0.8	20	1	US-09-269-136B-4	Sequence 4, Appli
254	14.4	0.8	22	1	US-08-667-079B-20	Sequence 20, Appl	c 327	14.2	0.8	20	1	US-08-903-446A-14	Sequence 14, Appl
c 255	14.2	0.8	19	1	US-08-009-263C-28	Sequence 28, Appl	328	14.2	0.8	20	1	US-09-104-382-7	Sequence 7, Appl
c 256	14.2	0.8	19	1	US-08-009-263C-35	Sequence 35, Appl	329	14.2	0.8	20	1	US-09-428-583-68	Sequence 68, Appl
257	14.2	0.8	19	1	US-08-605-089-3	Sequence 3, Appli	c 330	14.2	0.8	20	1	US-09-364-416-99	Sequence 99, Appl
258	14.2	0.8	19	1	US-08-332-766A-56	Sequence 56, Appl	c 331	14.2	0.8	20	1	US-09-026-601-2	Sequence 2, Appli
c 259	14.2	0.8	19	1	US-08-838-715B-28	Sequence 28, Appl	c 332	14.2	0.8	20	1	US-09-026-601-3	Sequence 3, Appli
c 260	14.2	0.8	19	1	US-08-838-715B-35	Sequence 35, Appl	333	14.2	0.8	20	1	US-09-407-705C-1	Sequence 1, Appli
c 261	14.2	0.8	19	1	US-08-487-792-51	Sequence 51, Appl	334	14.2	0.8	20	1	US-09-702-327-66	Sequence 66, Appl
c 262	14.2	0.8	19	1	US-09-908-594-31	Sequence 51, Appl	335	14.2	0.8	20	1	US-09-658-679A-50	Sequence 50, Appl
263	14.2	0.8	19	1	US-08-921-497-1	Sequence 1, Appli	336	14.2	0.8	20	1	US-09-481-293-2	Sequence 2, Appli
264	14.2	0.8	19	1	US-09-696-791-216	Sequence 216, App	c 337	14.2	0.8	20	1	US-09-481-293-3	Sequence 3, Appli
265	14.2	0.8	19	1	US-09-696-791-217	Sequence 217, App	c 338	14.2	0.8	20	1	US-09-733-294A-89	Sequence 89, Appl
266	14.2	0.8	19	1	US-09-696-791-248	Sequence 248, App	339	14.2	0.8	20	1	US-09-422-978-6583	Sequence 6583, Ap
267	14.2	0.8	19	1	US-09-696-791-249	Sequence 249, App	340	14.2	0.8	20	1	US-09-705-267A-113	Sequence 113, App
268	14.2	0.8	19	1	US-08-696-791-250	Sequence 250, App	c 341	14.2	0.8	20	1	US-09-198-452A-5779	Sequence 5779, Ap
269	14.2	0.8	19	1	US-09-696-791-352	Sequence 352, App	342	14.2	0.8	20	1	US-09-833-555-7	Sequence 7, Appli
270	14.2	0.8	19	1	US-09-696-791-481	Sequence 481, App	c 343	14.2	0.8	20	1	US-09-503-653A-24	Sequence 24, Appl
c 271	14.2	0.8	19	1	US-09-696-791-584	Sequence 584, App	c 344	14.2	0.8	20	1	US-09-503-653A-44	Sequence 44, Appl
272	14.2	0.8	19	1	US-09-696-791-575	Sequence 675, App	345	14.2	0.8	20	1	US-09-939-379B-2	Sequence 2, Appli
273	14.2	0.8	19	1	US-09-696-791-576	Sequence 676, App	c 346	14.2	0.8	20	1	US-09-939-379B-3	Sequence 3, Appli
c 274	14.2	0.8	20	1	US-10-141-021-12	Sequence 12, Appl	c 347	14.2	0.8	20	1	US-09-860-473-147	Sequence 147, App
c 275	14.2	0.8	20	1	US-10-141-103-12	Sequence 12, Appl	348	14.2	0.8	20	1	US-09-961-663-2	Sequence 2, Appli
c 276	14.2	0.8	20	1	US-10-141-063-12	Sequence 12, Appl	c 349	14.2	0.8	20	1	US-09-961-663-3	Sequence 3, Appli
c 277	14.2	0.8	20	1	US-10-141-094-12	Sequence 12, Appl	c 350	14.2	0.8	20	1	US-09-913-192A-8	Sequence 8, Appli
c 278	14.2	0.8	20	1	US-10-141-060-12	Sequence 12, Appl	351	14.2	0.8	20	1	PCT-US95-04712-39	Sequence 39, Appl
c 279	14.2	0.8	20	1	US-10-141-093-12	Sequence 12, Appl	c 352	14.2	0.8	20	1	PCT-US95-04712-40	Sequence 40, Appl
c 280	14.2	0.8	20	1	US-08-065-845-2	Sequence 2, Appli	353	14.2	0.8	21	1	US-08-373-124A-54	Sequence 54, Appl
281	14.2	0.8	20	1	US-08-065-845-4	Sequence 4, Appli	354	14.2	0.8	21	1	US-08-424-874-1	Sequence 1, Appli
c 282	14.2	0.8	20	1	US-08-009-263C-30	Sequence 30, Appl	355	14.2	0.8	21	1	US-08-323-192D-1	Sequence 1, Appli
c 283	14.2	0.8	20	1	US-08-222-177A-339	Sequence 339, App	356	14.2	0.8	21	1	US-08-435-628-54	Sequence 54, Appl
284	14.2	0.8	20	1	US-08-233-608-39	Sequence 39, Appl	357	14.2	0.8	21	1	US-08-470-887A-1	Sequence 1, Appli
c 285	14.2	0.8	20	1	US-08-233-608-40	Sequence 40, Appl	c 358	14.2	0.8	21	1	US-08-718-596-1	Sequence 1, Appli
c 286	14.2	0.8	20	1	US-08-429-523-2	Sequence 2, Appli	359	14.2	0.8	21	1	US-08-252-508B-1	Sequence 1, Appli
c 287	14.2	0.8	20	1	US-08-429-523-4	Sequence 4, Appli	360	14.2	0.8	21	1	US-08-627-695-1	Sequence 1, Appli
c 288	14.2	0.8	20	1	US-08-429-532-2	Sequence 2, Appli	361	14.2	0.8	21	1	US-09-106-377-1	Sequence 1, Appli
289	14.2	0.8	20	1	US-08-429-532-4	Sequence 4, Appli	362	14.2	0.8	21	1	US-09-344-520-3	Sequence 3, Appli
c 290	14.2	0.8	20	1	US-08-429-522-2	Sequence 2, Appli	c 363	14.2	0.8	21	1	US-09-118-408-41	Sequence 41, Appl
291	14.2	0.8	20	1	US-08-429-522-4	Sequence 4, Appli	c 364	14.2	0.8	21	1	US-09-328-174A-108	Sequence 108, App
c 292	14.2	0.8	20	1	US-08-429-520-2	Sequence 2, Appli	c 365	14.2	0.8	21	1	US-09-506-855-41	Sequence 41, Appl
c 293	14.2	0.8	20	1	US-08-429-520-4	Sequence 4, Appli	366	14.2	0.8	21	1	US-09-636-382A-5	Sequence 5, Appli
c 294	14.2	0.8	20	1	US-08-531-556-102	Sequence 102, App	c 367	14.2	0.8	21	1	US-09-911-176B-41	Sequence 41, Appl
295	14.2	0.8	20	1	US-08-742-023-11	Sequence 11, Appl	c 368	14.2	0.8	21	1	US-09-422-978-8100	Sequence 8100, Ap
c 296	14.2	0.8	20	1	US-08-742-023-11	Sequence 11, Appl	c 369	14.2	0.8	21	1	US-09-619-740-41	Sequence 41, Appl
297	14.2	0.8	20	1	US-08-887-480-39	Sequence 39, Appl	c 370	14.2	0.8	21	1	US-09-506-852-41	Sequence 41, Appl
c 298	14.2	0.8	20	1	US-08-887-480-40	Sequence 40, Appl	371	14.2	0.8	21	1	US-09-032-438C-72	Sequence 72, Appl
c 299	14.2	0.8	20	1	US-08-905-314A-2	Sequence 2, Appli	c 372	14.2	0.8	21	1	US-09-657-472-18	Sequence 18, Appl
300	14.2	0.8	20	1	US-08-905-314A-3	Sequence 3, Appli	373	14.2	0.8	21	1	US-09-657-472-824	Sequence 824, App
c 301	14.2	0.8	20	1	US-08-267-803B-79	Sequence 79, Appl	374	14.2	0.8	21	1	US-09-657-472-1083	Sequence 1083, Ap
c 302	14.2	0.8	20	1	US-08-753-979A-32	Sequence 32, Appl	375	14.2	0.8	21	1	US-09-657-472-1320	Sequence 1320, Ap
303	14.2	0.8	20	1	US-08-709-874A-7	Sequence 7, Appli	c 376	14.2	0.8	21	1	US-09-657-472-1580	Sequence 1580, Ap
c 304	14.2	0.8	20	1	US-08-704-207-2	Sequence 2, Appli	377	14.2	0.8	21	1	5166057-14	Patent No. 5166057
305	14.2	0.8	20	1	US-08-879-260-7	Sequence 7, Appli	378	14	0.8	15	1	US-08-291-932A-319	Sequence 319, App
c 306	14.2	0.8	20	1	US-08-726-012B-14	Sequence 14, Appl	c 379	14	0.8	17	1	US-08-985-162-277	Sequence 277, App
307	14.2	0.8	20	1	US-08-722-187-39	Sequence 39, Appl	c 380	14	0.8	17	1	US-08-985-162-278	Sequence 278, App
c 308	14.2	0.8	20	1	US-08-722-187-40	Sequence 40, Appl	381	14	0.8	17	1	US-08-584-040-4187	Sequence 4187, Ap
c 309	14.2	0.8	20	1	US-08-837-201C-99	Sequence 99, Appl	382	14	0.8	17	1	US-08-584-040-7661	Sequence 7661, Ap
c 310	14.2	0.8	20	1	US-08-822-028-24	Sequence 24, Appl	383	14	0.8	17	1	US-08-584-040-7677	Sequence 7677, Ap
c 311	14.2	0.8	20	1	US-08-822-028-44	Sequence 44, Appl	384	14	0.8	17	1	US-08-584-040-7678	Sequence 7678, Ap
312	14.2	0.8	20	1	US-08-707-399E-6	Sequence 6, Appli	385	14	0.8	17	1	US-09-371-772B-1954	Sequence 1954, Ap
c 313	14.2	0.8	20	1	US-09-357-070-29	Sequence 29, Appl	386	14	0.8	17	1	US-09-371-772B-3450	Sequence 3450, Ap
314	14.2	0.8	20	1	US-08-968-505-10	Sequence 10, Appl	387	14	0.8	17	1	US-09-371-772B-3462	Sequence 3462, Ap
c 315	14.2	0.8	20	1	US-08-968-505-11	Sequence 11, Appl	388	14	0.8	17	1	US-09-371-772B-3463	Sequence 3463, Ap
c 316	14.2	0.8	20	1	US-09-287-796-121	Sequence 121, App	389	14	0.8	17	1	US-09-371-772B-6817	Sequence 6817, Ap
c 317	14.2	0.8	20	1	US-08-838-715B-30	Sequence 30, Appl	390	14	0.8	17	1	US-09-371-772B-6818	Sequence 6818, Ap
c 318	14.2	0.8	20	1	US-08-838-715B-90	Sequence 90, Appl	c 391	14	0.8	17	1	US-09-401-063-277	Sequence 277, App
319	14.2	0.8	20	1	US-09-087-194-18	Sequence 18, Appl	c 392	14	0.8	17	1	US-09-401-063-278	Sequence 278, App
c 320	14.2	0.8	20	1	US-08-479-285-24	Sequence 24, Appl	393	14	0.8	17	1	US-09-827-998-541	Sequence 541, App
c 321	14.2	0.8	20	1	US-08-479-285-44	Sequence 44, Appl	394	14	0.8	17	1	US-09-827-998-542	Sequence 542, App
c 322	14.2	0.8	20	1	US-09-258-967-2	Sequence 2, Appli	395	14	0.8	18	1	US-09-213-767-9	Sequence 9, Appli
c 323	14.2	0.8	20	1	US-09-258-967-3	Sequence 3, Appli	396	14	0.8	18	1	US-08-584-040-4492	Sequence 4492, Ap
c 324	14.2	0.8	20	1	US-09-130-616-121	Sequence 121, App	397	14	0.8	18	1	US-09-371-772B-2205	Sequence 2205, Ap
c 325	14.2	0.8	20	1	US-09-269-136B-2	Sequence 2, Appli	398	14	0.8	19	1	US-09-696-791-203	Sequence 203, App

c 399	14	0.8	20	1	US-09-953-318-143	Sequence 143, App	c 472	13.8	0.8	20	1	US-09-344-001-33	Sequence 33, Appl
c 400	14	0.8	20	1	US-09-574-779B-14	Sequence 14, Appl	c 473	13.8	0.8	20	1	US-08-810-641-3	Sequence 3, Appl
c 401	14	0.8	20	1	US-09-574-779B-25	Sequence 25, Appl	c 474	13.8	0.8	20	1	US-08-970-725-10	Sequence 10, Appl
c 402	14	0.8	20	1	US-09-899-440-3	Sequence 3, Appl	c 475	13.8	0.8	20	1	US-09-092-077-11	Sequence 11, Appl
c 403	14	0.8	21	1	US-09-435-739-17	Sequence 17, Appl	c 476	13.8	0.8	20	1	US-09-092-077-13	Sequence 13, Appl
c 404	14	0.8	21	1	US-09-032-438C-24	Sequence 24, Appl	c 477	13.8	0.8	20	1	US-09-983-466-7	Sequence 7, Appl
c 405	14	0.8	21	1	US-09-657-472-1323	Sequence 1323, Ap	c 478	13.8	0.8	20	1	US-09-389-896-3	Sequence 3, Appl
c 406	14	0.8	21	1	US-09-657-472-1669	Sequence 1669, Ap	c 479	13.8	0.8	20	1	US-09-489-869-21	Sequence 21, Appl
c 407	14	0.8	21	1	US-09-988-113-17	Sequence 17, Appl	c 480	13.8	0.8	20	1	US-09-344-491A-1	Sequence 1, Appl
c 408	13.8	0.8	21	1	US-08-166-664-7	Sequence 7, Appl	c 481	13.8	0.8	20	1	US-09-344-491A-3	Sequence 3, Appl
c 409	13.8	0.8	17	1	US-08-373-124A-942	Sequence 942, App	c 482	13.8	0.8	20	1	US-09-364-416-9	Sequence 9, Appl
c 410	13.8	0.8	17	1	US-08-486-408-10	Sequence 10, Appl	c 483	13.8	0.8	20	1	US-08-367-841A-13	Sequence 13, Appl
c 411	13.8	0.8	17	1	US-08-435-628-942	Sequence 942, App	c 484	13.8	0.8	20	1	US-09-302-620B-47	Sequence 47, Appl
c 412	13.8	0.8	17	1	US-08-292-620A-1682	Sequence 1682, Ap	c 485	13.8	0.8	20	1	US-09-210-748A-12	Sequence 12, Appl
c 413	13.8	0.8	17	1	US-08-975-570-10	Sequence 10, Appl	c 486	13.8	0.8	20	1	US-09-702-251-77	Sequence 77, Appl
c 414	13.8	0.8	17	1	US-09-071-845-1682	Sequence 1682, Ap	c 487	13.8	0.8	20	1	US-09-702-246-66	Sequence 66, Appl
c 415	13.8	0.8	17	1	US-08-584-040-4222	Sequence 4222, Ap	c 488	13.8	0.8	20	1	US-09-506-073-83	Sequence 83, Appl
c 416	13.8	0.8	17	1	US-09-371-772B-1989	Sequence 1989, Ap	c 489	13.8	0.8	20	1	US-09-851-062-39	Sequence 39, Appl
c 417	13.8	0.8	17	1	US-09-827-998-575	Sequence 575, App	c 490	13.8	0.8	20	1	US-08-520-373D-9	Sequence 9, Appl
c 418	13.8	0.8	17	1	US-09-827-998-576	Sequence 576, App	c 491	13.8	0.8	20	1	US-09-898-361-71	Sequence 71, Appl
c 419	13.8	0.8	17	1	US-09-866-108A-1526	Sequence 1526, Ap	c 492	13.8	0.8	20	1	US-09-782-516A-1	Sequence 1, Appl
c 420	13.8	0.8	17	1	US-09-866-108A-6795	Sequence 6795, Ap	c 493	13.8	0.8	20	1	US-09-782-516A-3	Sequence 3, Appl
c 421	13.8	0.8	17	1	US-09-866-108A-6796	Sequence 6796, Ap	c 494	13.8	0.8	20	1	US-09-422-978-4109	Sequence 4109, Ap
c 422	13.8	0.8	17	1	US-09-866-108A-8045	Sequence 8045, Ap	c 495	13.8	0.8	20	1	US-09-060-299-357	Sequence 357, App
c 423	13.8	0.8	17	1	US-09-866-108A-10010	Sequence 10010, A	c 496	13.8	0.8	20	1	US-09-402-923A-357	Sequence 357, App
c 424	13.8	0.8	17	1	US-09-866-108A-10664	Sequence 10664, A	c 497	13.8	0.8	20	1	US-09-198-452A-1337	Sequence 1337, Ap
c 425	13.8	0.8	17	1	US-09-404-912-554	Sequence 554, App	c 498	13.8	0.8	20	1	US-09-679-299A-119	Sequence 119, App
c 426	13.8	0.8	18	1	US-09-256-496-10	Sequence 10, Appl	c 499	13.8	0.8	20	1	US-09-377-497-21	Sequence 21, Appl
c 427	13.8	0.8	18	1	US-08-009-263C-32	Sequence 32, Appl	c 500	13.8	0.8	20	1	US-09-493-714C-7	Sequence 7, Appl
c 428	13.8	0.8	18	1	US-09-205-922-40	Sequence 40, Appl	c 501	13.8	0.8	20	1	US-09-939-581A-12	Sequence 12, Appl
c 429	13.8	0.8	18	1	US-09-197-008-19	Sequence 19, Appl	c 502	13.8	0.8	20	1	US-09-771-357-42	Sequence 42, Appl
c 430	13.8	0.8	18	1	US-08-956-242-10	Sequence 10, Appl	c 503	13.8	0.8	20	1	PCT-US95-02708-10	Sequence 10, Appl
c 431	13.8	0.8	18	1	US-09-256-496-9	Sequence 9, Appl	c 504	13.8	0.8	20	1	PCT-US95-07201-13	Sequence 13, Appl
c 432	13.8	0.8	18	1	US-09-339-993-44	Sequence 44, Appl	c 505	13.8	0.8	21	1	US-08-127-95A-15	Sequence 15, Appl
c 433	13.8	0.8	18	1	US-09-351-215-10	Sequence 10, Appl	c 506	13.8	0.8	21	1	US-08-474-542A-142	Sequence 142, App
c 434	13.8	0.8	18	1	US-09-289-466-52	Sequence 52, Appl	c 507	13.8	0.8	21	1	US-08-374-770-9	Sequence 9, Appl
c 435	13.8	0.8	18	1	US-08-838-715B-32	Sequence 32, Appl	c 508	13.8	0.8	21	1	US-08-457-648-142	Sequence 142, App
c 436	13.8	0.8	18	1	US-09-025-701-3	Sequence 3, Appl	c 509	13.8	0.8	21	1	US-08-461-593B-9	Sequence 9, Appl
c 437	13.8	0.8	18	1	US-08-584-040-6244	Sequence 6244, Ap	c 510	13.8	0.8	21	1	US-08-651-323A-9	Sequence 9, Appl
c 438	13.8	0.8	18	1	US-09-371-772B-3004	Sequence 3004, Ap	c 511	13.8	0.8	21	1	US-08-875-573-10	Sequence 10, Appl
c 439	13.8	0.8	18	1	US-09-640-196D-22	Sequence 22, Appl	c 512	13.8	0.8	21	1	US-08-687-421-390	Sequence 390, App
c 440	13.8	0.8	18	1	US-09-639-667-18	Sequence 18, Appl	c 513	13.8	0.8	21	1	US-09-046-894-15	Sequence 15, Appl
c 441	13.8	0.8	18	1	US-09-747-391-127	Sequence 127, App	c 514	13.8	0.8	21	1	US-08-679-493A-128	Sequence 128, App
c 442	13.8	0.8	18	1	US-09-696-791-4273	Sequence 4273, Ap	c 515	13.8	0.8	21	1	US-09-479-128-3	Sequence 3, Appl
c 443	13.8	0.8	19	1	US-08-009-263C-31	Sequence 31, Appl	c 516	13.8	0.8	21	1	US-09-616-761-1	Sequence 1, Appl
c 444	13.8	0.8	19	1	US-08-400-580A-11	Sequence 11, Appl	c 517	13.8	0.8	21	1	US-09-422-978-10380	Sequence 10380, A
c 445	13.8	0.8	19	1	US-08-838-715B-31	Sequence 31, Appl	c 518	13.8	0.8	21	1	US-09-422-978-11492	Sequence 11492, A
c 446	13.8	0.8	19	1	US-09-780-173A-5	Sequence 5, Appl	c 519	13.8	0.8	21	1	US-09-823-634A-1	Sequence 1, Appl
c 447	13.8	0.8	19	1	US-09-696-791-20	Sequence 20, Appl	c 520	13.8	0.8	21	1	US-09-823-647B-1	Sequence 1, Appl
c 448	13.8	0.8	19	1	US-09-696-791-225	Sequence 225, App	c 521	13.8	0.8	21	1	US-09-526-193A-171	Sequence 171, App
c 449	13.8	0.8	19	1	US-09-696-791-315	Sequence 315, App	c 522	13.8	0.8	21	1	US-09-743-871B-21	Sequence 21, Appl
c 450	13.8	0.8	19	1	US-09-696-791-334	Sequence 334, App	c 523	13.8	0.8	21	1	US-09-743-871B-25	Sequence 25, Appl
c 451	13.8	0.8	19	1	US-09-696-791-335	Sequence 335, App	c 524	13.8	0.8	21	1	US-09-995-686-1	Sequence 1, Appl
c 452	13.8	0.8	19	1	US-09-696-791-460	Sequence 460, App	c 525	13.8	0.8	21	1	US-09-657-472-77	Sequence 77, Appl
c 453	13.8	0.8	19	1	US-09-696-791-473	Sequence 473, App	c 526	13.8	0.8	21	1	US-09-657-472-1150	Sequence 1150, Ap
c 454	13.8	0.8	19	1	US-09-696-791-606	Sequence 606, App	c 527	13.8	0.8	21	1	US-09-657-472-1498	Sequence 1498, Ap
c 455	13.8	0.8	19	1	US-09-696-791-2009	Sequence 2009, Ap	c 528	13.8	0.8	21	1	US-09-657-472-2302	Sequence 2302, Ap
c 456	13.8	0.8	20	1	US-07-941-370-1	Sequence 1, Appl	c 529	13.8	0.8	21	1	US-09-771-357-31	Sequence 31, Appl
c 457	13.8	0.8	20	1	US-08-390-256-3	Sequence 3, Appl	c 530	13.6	0.8	20	1	US-07-972-791-24	Sequence 24, Appl
c 458	13.8	0.8	20	1	US-08-146-422-30	Sequence 30, Appl	c 531	13.6	0.8	20	1	US-07-626-618A-10	Sequence 10, Appl
c 459	13.8	0.8	20	1	US-08-146-424-31	Sequence 31, Appl	c 532	13.6	0.8	20	1	US-08-063-167A-15	Sequence 15, Appl
c 460	13.8	0.8	20	1	US-08-221-465-1	Sequence 1, Appl	c 533	13.6	0.8	20	1	US-08-250-856A-11	Sequence 11, Appl
c 461	13.8	0.8	20	1	US-08-221-465-3	Sequence 3, Appl	c 534	13.6	0.8	20	1	US-08-007-997A-15	Sequence 15, Appl
c 462	13.8	0.8	20	1	US-08-212-188-10	Sequence 10, Appl	c 535	13.6	0.8	20	1	US-08-333-977-10	Sequence 10, Appl
c 463	13.8	0.8	20	1	US-08-626-554-13	Sequence 13, Appl	c 536	13.6	0.8	20	1	US-08-474-177-29	Sequence 29, Appl
c 464	13.8	0.8	20	1	US-08-693-709-14	Sequence 14, Appl	c 537	13.6	0.8	20	1	US-08-487-141B-83	Sequence 83, Appl
c 465	13.8	0.8	20	1	US-08-257-963B-13	Sequence 13, Appl	c 538	13.6	0.8	20	1	US-08-462-305-21	Sequence 21, Appl
c 466	13.8	0.8	20	1	US-08-457-273B-13	Sequence 13, Appl	c 539	13.6	0.8	20	1	US-08-487-303-29	Sequence 29, Appl
c 467	13.8	0.8	20	1	US-08-962-701-1	Sequence 1, Appl	c 540	13.6	0.8	20	1	US-08-480-810-29	Sequence 29, Appl
c 468	13.8	0.8	20	1	US-08-962-701-3	Sequence 3, Appl	c 541	13.6	0.8	20	1	US-08-578-590-14	Sequence 14, Appl
c 469	13.8	0.8	20	1	US-09-018-576-4	Sequence 4, Appl	c 542	13.6	0.8	20	1	US-08-440-740A-15	Sequence 15, Appl
c 470	13.8	0.8	20	1	US-08-837-201C-9	Sequence 9, Appl	c 543	13.6	0.8	20	1	US-08-508-733-29	Sequence 29, Appl
c 471	13.8	0.8	20	1	US-09-248-137-4	Sequence 4, Appl	c 544	13.6	0.8	20	1	US-08-568-459A-24	Sequence 24, Appl

C 545	13.6	0.8	20	1	US-08-117-952-744	Sequence 744, Appl	618	13.6	0.8	20	1	US-09-898-361-103	Sequence 103, Appl
C 546	13.6	0.8	20	1	US-08-808-474A-12	Sequence 12, Appl	619	13.6	0.8	20	1	US-09-668-313A-93	Sequence 93, Appl
C 547	13.6	0.8	20	1	US-08-808-474A-15	Sequence 15, Appl	C 620	13.6	0.8	20	1	US-09-422-978-11617	Sequence 11617, A
C 548	13.6	0.8	20	1	US-08-613-417A-21	Sequence 21, Appl	C 621	13.6	0.8	20	1	US-09-198-452A-2072	Sequence 2072, Ap
C 549	13.6	0.8	20	1	US-08-927-561-83	Sequence 83, Appl	C 622	13.6	0.8	20	1	US-09-198-452A-3394	Sequence 3394, Ap
C 550	13.6	0.8	20	1	US-08-875-154-22	Sequence 22, Appl	C 623	13.6	0.8	20	1	US-09-198-452A-3649	Sequence 3649, Ap
C 551	13.6	0.8	20	1	US-08-344-155C-15	Sequence 15, Appl	C 624	13.6	0.8	20	1	US-09-198-452A-4585	Sequence 4585, Ap
C 552	13.6	0.8	20	1	US-08-756-806A-11	Sequence 11, Appl	C 625	13.6	0.8	20	1	US-09-198-452A-5261	Sequence 5261, Ap
C 553	13.6	0.8	20	1	US-08-837-201C-20	Sequence 20, Appl	C 626	13.6	0.8	20	1	US-09-198-452A-5947	Sequence 5947, Ap
C 554	13.6	0.8	20	1	US-08-848-251-29	Sequence 29, Appl	C 627	13.6	0.8	20	1	US-09-198-452A-6067	Sequence 6067, Ap
C 555	13.6	0.8	20	1	US-08-487-848B-36	Sequence 36, Appl	C 628	13.6	0.8	20	1	US-09-670-216-1	Sequence 1, Appl
C 556	13.6	0.8	20	1	US-08-486-047-29	Sequence 29, Appl	C 629	13.6	0.8	20	1	US-09-670-216-2	Sequence 2, Appl
C 557	13.6	0.8	20	1	US-08-594-452-21	Sequence 21, Appl	C 630	13.6	0.8	20	1	US-09-692-820A-4	Sequence 4, Appl
C 558	13.6	0.8	20	1	US-08-982-845B-15	Sequence 15, Appl	C 631	13.6	0.8	20	1	US-09-665-615B-39	Sequence 39, Appl
C 559	13.6	0.8	20	1	US-08-578-686C-20	Sequence 20, Appl	C 632	13.6	0.8	20	1	US-08-278-774-24	Sequence 24, Appl
C 560	13.6	0.8	20	1	US-09-120-130-29	Sequence 29, Appl	C 633	13.6	0.8	20	1	US-08-870-956-33	Sequence 33, Appl
C 561	13.6	0.8	20	1	US-08-951-923-33	Sequence 33, Appl	C 634	13.6	0.8	20	1	US-10-215-448-70	Sequence 70, Appl
C 562	13.6	0.8	20	1	US-09-115-252-29	Sequence 29, Appl	C 635	13.6	0.8	20	1	US-10-215-448-102	Sequence 102, App
C 563	13.6	0.8	20	1	US-09-094-405-25	Sequence 25, Appl	C 636	13.6	0.8	20	1	US-09-747-772-3	Sequence 3, Appl
C 564	13.6	0.8	20	1	US-08-986-515-29	Sequence 29, Appl	C 637	13.6	0.8	20	1	US-09-747-772-4	Sequence 4, Appl
C 565	13.6	0.8	20	1	US-09-143-214-11	Sequence 11, Appl	C 638	13.6	0.8	20	1	US-10-029-588-2	Sequence 2, Appl
C 566	13.6	0.8	20	1	US-08-991-525B-15	Sequence 15, Appl	C 639	13.6	0.8	20	1	US-09-835-370-42	Sequence 42, Appl
C 567	13.6	0.8	20	1	US-09-085-759-15	Sequence 15, Appl	C 640	13.6	0.8	20	1	PCT-US93-08101-15	Sequence 15, Appl
C 568	13.6	0.8	20	1	US-09-358-685-31	Sequence 31, Appl	C 641	13.6	0.8	20	1	PCT-US95-07111A-11	Sequence 11, Appl
C 569	13.6	0.8	20	1	US-09-258-408-21	Sequence 21, Appl	C 642	13.6	0.8	20	1	PCT-US96-09388-83	Sequence 83, Appl
C 570	13.6	0.8	20	1	US-09-196-132-21	Sequence 21, Appl	C 643	13.6	0.8	21	1	US-09-657-472-2302	Sequence 2302, Ap
C 571	13.6	0.8	20	1	US-08-666-221B-30	Sequence 30, Appl	C 644	13.4	0.8	15	1	US-08-291-932A-320	Sequence 320, App
C 572	13.6	0.8	20	1	US-09-286-904-75	Sequence 75, Appl	C 645	13.4	0.8	15	1	US-09-081-646-233	Sequence 233, App
C 573	13.6	0.8	20	1	US-09-418-640-41	Sequence 41, Appl	C 646	13.4	0.8	15	1	US-08-584-040-8419	Sequence 8419, Ap
C 574	13.6	0.8	20	1	US-09-120-128-29	Sequence 29, Appl	C 647	13.4	0.8	15	1	US-09-371-772B-4075	Sequence 4075, Ap
C 575	13.6	0.8	20	1	US-09-144-112-20	Sequence 20, Appl	C 648	13.4	0.8	15	1	US-09-472-795B-1	Sequence 1, Appl
C 576	13.6	0.8	20	1	US-09-428-696-46	Sequence 46, Appl	C 649	13.4	0.8	16	1	US-09-371-772B-6994	Sequence 6994, Ap
C 577	13.6	0.8	20	1	US-09-128-496-15	Sequence 15, Appl	C 650	13.4	0.8	17	1	US-08-009-263C-33	Sequence 33, Appl
C 578	13.6	0.8	20	1	US-09-120-129-29	Sequence 29, Appl	C 651	13.4	0.8	17	1	US-08-985-162-301	Sequence 301, App
C 579	13.6	0.8	20	1	US-09-235-614-12	Sequence 12, Appl	C 652	13.4	0.8	17	1	US-08-838-715B-33	Sequence 33, Appl
C 580	13.6	0.8	20	1	US-09-235-614-15	Sequence 15, Appl	C 653	13.4	0.8	17	1	US-08-924-183-6	Sequence 6, Appl
C 581	13.6	0.8	20	1	US-09-290-640-39	Sequence 39, Appl	C 654	13.4	0.8	17	1	US-08-584-040-1929	Sequence 1929, Ap
C 582	13.6	0.8	20	1	US-09-201-139-29	Sequence 29, Appl	C 655	13.4	0.8	17	1	US-08-584-040-4221	Sequence 4221, Ap
C 583	13.6	0.8	20	1	US-09-030-701-65	Sequence 65, Appl	C 656	13.4	0.8	17	1	US-09-474-432B-438	Sequence 438, App
C 584	13.6	0.8	20	1	US-09-120-131-29	Sequence 29, Appl	C 657	13.4	0.8	17	1	US-09-474-432B-504	Sequence 504, App
C 585	13.6	0.8	20	1	US-08-430-286A-4	Sequence 4, Appl	C 658	13.4	0.8	17	1	US-09-371-772B-474	Sequence 474, App
C 586	13.6	0.8	20	1	US-09-183-846A-1	Sequence 1, Appl	C 659	13.4	0.8	17	1	US-09-371-772B-1988	Sequence 1988, Ap
C 587	13.6	0.8	20	1	US-09-183-846A-2	Sequence 2, Appl	C 660	13.4	0.8	17	1	US-09-371-772B-4764	Sequence 4764, Ap
C 588	13.6	0.8	20	1	US-08-943-731-542	Sequence 542, App	C 661	13.4	0.8	17	1	US-03-476-387-437	Sequence 437, App
C 589	13.6	0.8	20	1	US-09-489-868A-48	Sequence 48, Appl	C 662	13.4	0.8	17	1	US-09-476-387-503	Sequence 503, App
C 590	13.6	0.8	20	1	US-09-593-711A-74	Sequence 74, Appl	C 663	13.4	0.8	17	1	US-09-401-063-301	Sequence 301, App
C 591	13.6	0.8	20	1	US-09-109-663-36	Sequence 36, Appl	C 664	13.4	0.8	17	1	US-09-827-998-546	Sequence 546, App
C 592	13.6	0.8	20	1	US-09-364-416-20	Sequence 15, Appl	C 665	13.4	0.8	17	1	US-09-866-108A-66	Sequence 66, Appl
C 593	13.6	0.8	20	1	US-09-488-856A-15	Sequence 15, Appl	C 666	13.4	0.8	17	1	US-09-866-108A-67	Sequence 67, Appl
C 594	13.6	0.8	20	1	US-08-895-981-21	Sequence 21, Appl	C 667	13.4	0.8	17	1	US-09-866-108A-68	Sequence 68, Appl
C 595	13.6	0.8	20	1	US-09-657-042A-12	Sequence 12, Appl	C 668	13.4	0.8	17	1	US-09-866-108A-8896	Sequence 8896, Ap
C 596	13.6	0.8	20	1	US-08-082-649B-57	Sequence 57, Appl	C 669	13.4	0.8	17	1	US-09-866-108A-8897	Sequence 8897, Ap
C 597	13.6	0.8	20	1	US-09-268-992-28	Sequence 28, Appl	C 670	13.4	0.8	17	1	US-09-866-108A-8898	Sequence 8898, Ap
C 598	13.6	0.8	20	1	US-09-161-241-22	Sequence 22, Appl	C 671	13.4	0.8	18	1	US-08-363-240A-1197	Sequence 1197, Ap
C 599	13.6	0.8	20	1	US-08-337-120A-29	Sequence 29, Appl	C 672	13.4	0.8	18	1	US-03-205-860-77	Sequence 77, Appl
C 600	13.6	0.8	20	1	US-08-339-214-67	Sequence 67, Appl	C 673	13.4	0.8	18	1	US-03-163-485-21	Sequence 21, Appl
C 601	13.6	0.8	20	1	US-08-339-214-68	Sequence 68, Appl	C 674	13.4	0.8	18	1	US-09-194-842A-11	Sequence 11, Appl
C 602	13.6	0.8	20	1	US-09-210-288-24	Sequence 24, Appl	C 675	13.4	0.8	18	1	US-09-555-313B-18	Sequence 18, Appl
C 603	13.6	0.8	20	1	US-08-657-474-28	Sequence 28, Appl	C 676	13.4	0.8	18	1	US-09-422-978-8777	Sequence 8777, Ap
C 604	13.6	0.8	20	1	US-09-506-073-11	Sequence 11, Appl	C 677	13.4	0.8	18	1	US-07-695-564-13	Sequence 13, Appl
C 605	13.6	0.8	20	1	US-08-961-578C-1	Sequence 1, Appl	C 678	13.4	0.8	19	1	US-08-241-387-13	Sequence 13, Appl
C 606	13.6	0.8	20	1	US-08-961-578C-2	Sequence 2, Appl	C 679	13.4	0.8	19	1	US-09-297-911-24	Sequence 24, Appl
C 607	13.6	0.8	20	1	US-09-853-768-73	Sequence 73, Appl	C 680	13.4	0.8	19	1	US-09-696-791-879	Sequence 879, App
C 608	13.6	0.8	20	1	US-09-640-101-75	Sequence 75, Appl	C 681	13.4	0.8	20	1	US-07-841-652-17	Sequence 17, Appl
C 609	13.6	0.8	20	1	US-09-791-211-78	Sequence 78, Appl	C 682	13.4	0.8	20	1	US-08-246-982A-25	Sequence 25, Appl
C 610	13.6	0.8	20	1	US-09-505-067-47	Sequence 47, Appl	C 683	13.4	0.8	20	1	US-08-453-265-25	Sequence 25, Appl
C 611	13.6	0.8	20	1	US-09-851-062-47	Sequence 47, Appl	C 684	13.4	0.8	20	1	US-08-555-678-49	Sequence 49, Appl
C 612	13.6	0.8	20	1	US-09-517-467B-125	Sequence 125, App	C 685	13.4	0.8	20	1	US-08-531-556-60	Sequence 60, Appl
C 613	13.6	0.8	20	1	US-09-517-467B-280	Sequence 280, App	C 686	13.4	0.8	20	1	US-08-472-416-60	Sequence 60, Appl
C 614	13.6	0.8	20	1	US-09-780-049-29	Sequence 29, Appl	C 687	13.4	0.8	20	1	US-08-472-416-85	Sequence 85, Appl
C 615	13.6	0.8	20	1	US-09-288-679-4	Sequence 4, Appl	C 688	13.4	0.8	20	1	US-08-753-979A-16	Sequence 16, Appl
C 616	13.6	0.8	20	1	US-09-844-525A-23	Sequence 23, Appl	C 689	13.4	0.8	20	1		
C 617	13.6	0.8	20	1	US-09-643-233-20	Sequence 20, Appl	C 690	13.4	0.8	20	1		



691	13.4	0.8	20	1	US-08-753-979A-37	Sequence 37, Appl	c 764	13.2	0.8	19	1	US-09-957-189-6	Sequence 6, Appl
c 692	13.4	0.8	20	1	US-09-286-904-65	Sequence 65, Appl	765	13.2	0.8	19	1	US-09-952-267B-21	Sequence 21, Appl
c 693	13.4	0.8	20	1	US-09-428-696-48	Sequence 48, Appl	766	13.2	0.8	19	1	US-09-696-791-227	Sequence 227, App
c 694	13.4	0.8	20	1	US-09-428-696-78	Sequence 78, Appl	767	13.2	0.8	19	1	US-09-696-791-228	Sequence 228, App
695	13.4	0.8	20	1	US-09-517-584A-65	Sequence 65, Appl	768	13.2	0.8	19	1	US-09-696-791-566	Sequence 566, App
696	13.4	0.8	20	1	US-09-050-159-36	Sequence 36, Appl	769	13.2	0.8	19	1	US-09-696-791-568	Sequence 568, App
c 697	13.4	0.8	20	1	US-09-311-260-83	Sequence 83, Appl	770	13.2	0.8	19	1	US-09-696-791-677	Sequence 677, App
c 698	13.4	0.8	20	1	US-09-457-474-1	Sequence 1, Appl	771	13.2	0.8	19	1	US-09-696-791-784	Sequence 784, App
699	13.4	0.8	20	1	US-09-662-249A-12	Sequence 12, Appl	772	13.2	0.8	19	1	US-09-696-791-1219	Sequence 1219, Ap
700	13.4	0.8	20	1	US-09-662-249A-13	Sequence 13, Appl	c 773	13.2	0.8	19	1	US-09-696-791-1346	Sequence 1346, Ap
c 701	13.4	0.8	20	1	US-09-277-078-40	Sequence 40, Appl	774	13.2	0.8	19	1	US-09-696-791-1930	Sequence 1930, Ap
702	13.4	0.8	20	1	US-09-270-543-157	Sequence 157, App	775	13.2	0.8	19	1	US-09-696-791-2050	Sequence 2050, Ap
703	13.4	0.8	20	1	US-07-711-303-1	Sequence 1, Appl	776	13.2	0.8	19	1	US-09-696-791-3890	Sequence 3890, Ap
704	13.4	0.8	20	1	US-07-711-303-6	Sequence 6, Appl	777	13.2	0.8	20	1	US-07-977-694-36	Sequence 36, Appl
705	13.4	0.8	20	1	US-07-711-303-8	Sequence 8, Appl	778	13.2	0.8	20	1	US-07-977-694-36	Sequence 36, Appl
706	13.4	0.8	20	1	US-09-702-251-26	Sequence 26, Appl	c 779	13.2	0.8	20	1	US-07-940-242A-41	Sequence 41, Appl
c 707	13.4	0.8	20	1	US-09-851-520-44	Sequence 44, Appl	780	13.2	0.8	20	1	US-08-250-849-13	Sequence 9, Appl
c 708	13.4	0.8	20	1	US-09-640-101-65	Sequence 65, Appl	781	13.2	0.8	20	1	US-07-977-630-9	Sequence 9, Appl
709	13.4	0.8	20	1	US-09-659-845A-106	Sequence 106, App	782	13.2	0.8	20	1	US-08-435-529-12	Sequence 12, Appl
c 710	13.4	0.8	20	1	US-09-422-978-7238	Sequence 7238, Ap	c 783	13.2	0.8	20	1	US-08-379-078-597	Sequence 597, App
711	13.4	0.8	20	1	US-09-198-452A-2555	Sequence 2555, Ap	784	13.2	0.8	20	1	US-08-403-555-10	Sequence 10, Appl
c 712	13.4	0.8	20	1	US-09-198-452A-5490	Sequence 5490, Ap	c 785	13.2	0.8	20	1	US-08-089-996-44	Sequence 44, Appl
713	13.4	0.8	20	1	US-09-619-813-11	Sequence 11, Appl	786	13.2	0.8	20	1	US-08-328-314-13	Sequence 13, Appl
714	13.4	0.8	20	1	US-08-009-2630-36	Sequence 36, Appl	c 788	13.2	0.8	20	1	US-08-434-074-13	Sequence 13, Appl
c 715	13.2	0.8	18	1	US-08-009-2630-36	Sequence 36, Appl	c 788	13.2	0.8	20	1	US-08-731-045-13	Sequence 13, Appl
c 716	13.2	0.8	18	1	US-08-050-073-174	Sequence 174, App	c 789	13.2	0.8	20	1	US-08-466-886-10	Sequence 10, Appl
717	13.2	0.8	18	1	US-08-432-871C-30	Sequence 30, Appl	790	13.2	0.8	20	1	US-08-466-886-10	Sequence 10, Appl
c 718	13.2	0.8	18	1	US-09-156-425-22	Sequence 22, Appl	791	13.2	0.8	20	1	US-08-374-155A-18	Sequence 18, Appl
719	13.2	0.8	18	1	US-08-461-286-15	Sequence 15, Appl	792	13.2	0.8	20	1	US-08-910-973-23	Sequence 23, Appl
c 720	13.2	0.8	18	1	US-09-106-038A-70	Sequence 70, Appl	793	13.2	0.8	20	1	US-08-800-036-7	Sequence 7, Appl
721	13.2	0.8	18	1	US-09-205-921-31	Sequence 31, Appl	c 794	13.2	0.8	20	1	US-08-117-953-120	Sequence 120, App
c 722	13.2	0.8	18	1	US-09-339-993-30	Sequence 30, Appl	795	13.2	0.8	20	1	US-08-478-178A-44	Sequence 44, Appl
c 723	13.2	0.8	18	1	US-08-308-643C-70	Sequence 70, Appl	c 796	13.2	0.8	20	1	US-08-344-155C-88	Sequence 88, Appl
c 724	13.2	0.8	18	1	US-09-173-941-112	Sequence 112, App	797	13.2	0.8	20	1	US-08-488-177-44	Sequence 44, Appl
725	13.2	0.8	18	1	US-08-838-715B-36	Sequence 36, Appl	c 798	13.2	0.8	20	1	US-08-588-521-6	Sequence 6, Appl
726	13.2	0.8	18	1	US-08-891-292A-78	Sequence 78, Appl	799	13.2	0.8	20	1	US-08-481-072A-44	Sequence 44, Appl
c 727	13.2	0.8	18	1	US-08-584-040-3042	Sequence 3042, Ap	800	13.2	0.8	20	1	US-08-664-336-44	Sequence 44, Appl
728	13.2	0.8	18	1	US-09-167-109-109	Sequence 109, App	801	13.2	0.8	20	1	US-08-854-727-14	Sequence 14, Appl
729	13.2	0.8	18	1	US-09-270-956-30	Sequence 30, Appl	c 802	13.2	0.8	20	1	US-08-854-727-34	Sequence 34, Appl
c 730	13.2	0.8	18	1	US-09-250-609-56	Sequence 56, Appl	803	13.2	0.8	20	1	US-08-663-230-11	Sequence 11, Appl
c 731	13.2	0.8	18	1	US-09-920-760-43	Sequence 43, Appl	804	13.2	0.8	20	1	US-08-481-066A-44	Sequence 4, Appl
c 732	13.2	0.8	18	1	US-09-642-952-16	Sequence 16, Appl	805	13.2	0.8	20	1	US-08-926-492-7	Sequence 7, Appl
c 733	13.2	0.8	18	1	US-09-250-611-56	Sequence 56, Appl	806	13.2	0.8	20	1	US-08-785-396-18	Sequence 18, Appl
c 734	13.2	0.8	18	1	US-09-422-978-7245	Sequence 7245, Ap	c 807	13.2	0.8	20	1	US-08-940-250-26	Sequence 26, Appl
c 735	13.2	0.8	18	1	US-09-422-978-11482	Sequence 11482, A	808	13.2	0.8	20	1	US-08-578-615A-44	Sequence 44, Appl
c 736	13.2	0.8	18	1	US-09-371-772B-1470	Sequence 1470, Ap	c 809	13.2	0.8	20	1	US-09-357-073-47	Sequence 47, Appl
737	13.2	0.8	18	1	US-09-927-737C-78	Sequence 78, Appl	810	13.2	0.8	20	1	US-09-357-071-18	Sequence 18, Appl
c 738	13.2	0.8	18	1	US-09-494-190-121	Sequence 121, App	811	13.2	0.8	20	1	US-09-048-505-7	Sequence 7, Appl
c 739	13.2	0.8	18	1	US-09-494-190-121	Sequence 121, App	812	13.2	0.8	20	1	US-08-746-111-51	Sequence 51, Appl
c 740	13.2	0.8	18	1	US-09-663-834B-34	Sequence 34, Appl	813	13.2	0.8	20	1	US-08-777-266A-26	Sequence 26, Appl
c 741	13.2	0.8	18	1	US-09-456-222B-16	Sequence 16, Appl	814	13.2	0.8	20	1	US-08-545-196B-56	Sequence 56, Appl
c 742	13.2	0.8	18	1	US-09-374-958C-77	Sequence 77, Appl	815	13.2	0.8	20	1	US-09-009-913-259	Sequence 259, App
743	13.2	0.8	18	1	US-09-544-398B-299	Sequence 299, App	c 816	13.2	0.8	20	1	US-08-846-020A-37	Sequence 37, Appl
744	13.2	0.8	18	1	US-09-696-791-4187	Sequence 4187, Ap	817	13.2	0.8	20	1	US-08-872-855-15	Sequence 15, Appl
745	13.2	0.8	18	1	US-09-696-791-4284	Sequence 4284, Ap	818	13.2	0.8	20	1	US-09-280-799-7	Sequence 7, Appl
746	13.2	0.8	18	1	PCT-US92-02854-15	Sequence 15, Appl	819	13.2	0.8	20	1	US-08-765-340-51	Sequence 51, Appl
c 747	13.2	0.8	18	1	US-08-473-096-18	Sequence 18, Appl	820	13.2	0.8	20	1	US-09-433-699-16	Sequence 16, Appl
c 748	13.2	0.8	19	1	US-08-379-680-7	Sequence 7, Appl	c 821	13.2	0.8	20	1	US-09-513-728B-30	Sequence 30, Appl
749	13.2	0.8	19	1	US-08-117-952-64	Sequence 64, Appl	822	13.2	0.8	20	1	US-09-490-692-74	Sequence 74, Appl
c 750	13.2	0.8	19	1	US-08-899-811-11	Sequence 11, Appl	c 823	13.2	0.8	20	1	US-09-517-584A-13	Sequence 13, Appl
751	13.2	0.8	19	1	US-08-899-811-11	Sequence 11, Appl	c 824	13.2	0.8	20	1	US-08-469-617-10	Sequence 10, Appl
752	13.2	0.8	19	1	US-08-899-811-11	Sequence 11, Appl	825	13.2	0.8	20	1	US-08-469-617-12	Sequence 12, Appl
753	13.2	0.8	19	1	US-08-473-020A-17	Sequence 17, Appl	c 826	13.2	0.8	20	1	US-08-960-780-70	Sequence 70, Appl
c 754	13.2	0.8	19	1	US-08-810-599-53	Sequence 53, Appl	827	13.2	0.8	20	1	US-08-960-780-116	Sequence 116, App
755	13.2	0.8	19	1	US-09-192-104-6	Sequence 6, Appl	c 828	13.2	0.8	20	1	US-09-313-932-260	Sequence 260, App
c 756	13.2	0.8	19	1	US-09-436-446-6	Sequence 6, Appl	829	13.2	0.8	20	1	US-09-313-932-304	Sequence 304, App
757	13.2	0.8	19	1	US-09-336-447A-21	Sequence 21, Appl	830	13.2	0.8	20	1	US-09-038-637-14	Sequence 14, Appl
c 758	13.2	0.8	19	1	US-09-302-681-49	Sequence 49, Appl	c 831	13.2	0.8	20	1	US-09-038-637-46	Sequence 46, Appl
c 759	13.2	0.8	19	1	US-09-302-681-50	Sequence 50, Appl	c 832	13.2	0.8	20	1	US-09-073-898-70	Sequence 70, Appl
c 760	13.2	0.8	19	1	US-09-422-978-9032	Sequence 9032, Ap	833	13.2	0.8	20	1	US-09-073-898-116	Sequence 116, App
761	13.2	0.8	19	1	US-09-422-978-9032	Sequence 9032, Ap	834	13.2	0.8	20	1	US-08-969-317-12	Sequence 12, Appl
762	13.2	0.8	19	1	US-09-422-978-11036	Sequence 11036, A	835	13.2	0.8	20	1	US-08-968-733-14	Sequence 14, Appl
c 763	13.2	0.8	19	1	US-09-422-978-11495	Sequence 11495, A	c 836	13.2	0.8	20	1	US-08-968-733-46	Sequence 46, Appl



C 837	13.2	0.8	20	1	US-07-974-409C-221	Sequence 221, App	910	13	0.7	17	1	US-09-371-772B-2069	Sequence 2069, Ap
C 838	13.2	0.8	20	1	US-09-484-617-121	Sequence 121, App	911	13	0.7	17	1	US-09-371-772B-3449	Sequence 3449, Ap
C 839	13.2	0.8	20	1	US-09-484-617-165	Sequence 165, App	912	13	0.7	17	1	US-09-371-772B-3461	Sequence 3461, Ap
C 840	13.2	0.8	20	1	US-09-484-617-174	Sequence 174, App	913	13	0.7	17	1	US-09-371-772B-6704	Sequence 6704, Ap
C 841	13.2	0.8	20	1	US-09-193-562D-23	Sequence 23, Appl	914	13	0.7	17	1	US-09-371-772B-6819	Sequence 6819, Ap
C 842	13.2	0.8	20	1	US-09-326-186B-26	Sequence 26, Appl	915	13	0.7	17	1	US-09-827-998-540	Sequence 540, App
C 843	13.2	0.8	20	1	US-08-829-637A-44	Sequence 44, Appl	C 916	13	0.7	18	1	US-08-361-479-29	Sequence 29, Appl
C 844	13.2	0.8	20	1	US-09-617-871-37	Sequence 37, Appl	C 917	13	0.7	18	1	US-08-473-576-29	Sequence 29, Appl
C 845	13.2	0.8	20	1	US-09-049-698-29	Sequence 29, Appl	C 918	13	0.7	18	1	US-08-843-718-29	Sequence 29, Appl
C 846	13.2	0.8	20	1	US-09-561-497-70	Sequence 70, Appl	919	13	0.7	18	1	US-09-029-213B-20	Sequence 20, Appl
C 847	13.2	0.8	20	1	US-09-702-327-46	Sequence 46, Appl	C 920	13	0.7	18	1	US-09-155-885A-248	Sequence 248, App
C 848	13.2	0.8	20	1	US-09-222-938A-82	Sequence 82, Appl	C 921	13	0.7	19	1	US-09-254-352B-33	Sequence 33, Appl
C 849	13.2	0.8	20	1	US-09-780-175-139	Sequence 139, App	922	13	0.7	19	1	US-09-696-791-19	Sequence 19, Appl
C 850	13.2	0.8	20	1	US-09-456-773-7	Sequence 7, Appli	C 923	13	0.7	20	1	US-08-136-811-15	Sequence 15, Appl
C 851	13.2	0.8	20	1	US-09-499-227-23	Sequence 23, Appl	C 924	13	0.7	20	1	US-08-495-034-11	Sequence 11, Appl
C 852	13.2	0.8	20	1	US-09-658-675A-71	Sequence 71, Appl	C 925	13	0.7	20	1	US-08-835-770-15	Sequence 15, Appl
C 853	13.2	0.8	20	1	US-09-851-062-43	Sequence 43, Appl	C 926	13	0.7	20	1	US-08-628-731-15	Sequence 15, Appl
C 854	13.2	0.8	20	1	US-09-517-467B-344	Sequence 344, App	C 927	13	0.7	20	1	US-08-757-653-164	Sequence 164, App
C 855	13.2	0.8	20	1	US-09-254-322-44	Sequence 44, Appl	C 928	13	0.7	20	1	US-08-669-753-27	Sequence 27, Appl
C 856	13.2	0.8	20	1	US-09-164-764-14	Sequence 14, Appl	929	13	0.7	20	1	US-08-743-637B-199	Sequence 199, App
C 857	13.2	0.8	20	1	US-09-164-764-34	Sequence 34, Appl	C 930	13	0.7	20	1	US-08-823-516-62	Sequence 62, Appl
C 858	13.2	0.8	20	1	US-09-920-668-37	Sequence 37, Appl	C 931	13	0.7	20	1	US-09-289-067-68	Sequence 68, Appl
C 859	13.2	0.8	20	1	US-08-961-309-39	Sequence 39, Appl	932	13	0.7	20	1	US-09-018-034-1	Sequence 1, Appli
C 860	13.2	0.8	20	1	US-08-388-852B-29	Sequence 29, Appl	C 933	13	0.7	20	1	US-09-018-034-8	Sequence 8, Appli
C 861	13.2	0.8	20	1	US-09-422-978-5836	Sequence 5836, Ap	C 934	13	0.7	20	1	US-09-018-034-15	Sequence 15, Appl
C 862	13.2	0.8	20	1	US-09-422-978-5872	Sequence 8572, Ap	935	13	0.7	20	1	US-08-777-266A-66	Sequence 66, Appl
C 863	13.2	0.8	20	1	US-10-025-139-44	Sequence 44, Appl	C 936	13	0.7	20	1	US-09-166-186-80	Sequence 80, Appl
C 864	13.2	0.8	20	1	US-09-198-452A-3591	Sequence 3591, Ap	C 937	13	0.7	20	1	US-08-759-038-103	Sequence 103, App
C 865	13.2	0.8	20	1	US-09-198-452A-3605	Sequence 3605, Ap	C 938	13	0.7	20	1	US-08-758-314-103	Sequence 103, App
C 866	13.2	0.8	20	1	US-09-198-452A-4303	Sequence 4303, Ap	C 939	13	0.7	20	1	US-08-817-177-9	Sequence 9, Appli
C 867	13.2	0.8	20	1	US-09-198-452A-4426	Sequence 4426, Ap	C 940	13	0.7	20	1	US-09-428-696-49	Sequence 49, Appl
C 868	13.2	0.8	20	1	US-09-198-452A-4963	Sequence 4963, Ap	C 941	13	0.7	20	1	US-09-226-012-47	Sequence 47, Appl
C 869	13.2	0.8	20	1	US-09-843-376-22	Sequence 22, Appl	C 942	13	0.7	20	1	US-09-313-932-80	Sequence 80, Appl
C 870	13.2	0.8	20	1	US-09-780-045-101	Sequence 101, App	943	13	0.7	20	1	US-09-326-186B-66	Sequence 66, Appl
C 871	13.2	0.8	20	1	US-09-307-106-20	Sequence 20, Appl	C 944	13	0.7	20	1	US-09-732-199A-19	Sequence 19, Appl
C 872	13.2	0.8	20	1	US-09-307-106-27	Sequence 27, Appl	945	13	0.7	20	1	US-09-575-506-1	Sequence 1, Appli
C 873	13.2	0.8	20	1	US-09-723-368-5	Sequence 5, Appli	C 946	13	0.7	20	1	US-09-575-506-8	Sequence 8, Appli
C 874	13.2	0.8	20	1	US-09-860-473-46	Sequence 46, Appl	C 947	13	0.7	20	1	US-09-575-506-15	Sequence 15, Appl
C 875	13.2	0.8	20	1	US-09-860-473-93	Sequence 93, Appl	C 948	13	0.7	20	1	US-09-684-938-103	Sequence 103, App
C 876	13.2	0.8	20	1	US-09-860-473-155	Sequence 155, App	C 949	13	0.7	20	1	US-09-198-452A-3020	Sequence 3020, Ap
C 877	13.2	0.8	20	1	US-09-850-351A-70	Sequence 70, Appl	C 950	13	0.7	20	1	US-09-198-452A-3023	Sequence 3023, Ap
C 878	13.2	0.8	20	1	US-09-850-351A-116	Sequence 116, App	C 951	13	0.7	20	1	US-09-308-825A-103	Sequence 103, App
C 879	13.2	0.8	20	1	US-09-747-391-169	Sequence 169, App	C 952	13	0.7	20	1	US-09-758-282B-52	Sequence 52, Appl
C 880	13.2	0.8	20	1	US-09-980-052-25	Sequence 25, Appl	C 953	13	0.7	20	1	US-09-151-376-33	Sequence 33, Appl
C 881	13.2	0.8	20	1	US-09-980-052-91	Sequence 81, Appl	C 954	13	0.7	20	1	US-09-548-797B-70	Sequence 70, Appl
C 882	13.2	0.8	20	1	US-10-055-412B-23	Sequence 23, Appl	C 955	13	0.7	20	1	US-09-548-797B-117	Sequence 117, App
C 883	13.2	0.8	20	1	US-10-011-119A-7	Sequence 7, Appli	C 956	13	0.7	20	1	US-09-940-244-62	Sequence 62, Appl
C 884	13.2	0.8	20	1	US-08-469-630-10	Sequence 10, Appl	C 957	13	0.7	20	1	US-09-577-304A-52	Sequence 52, Appl
C 885	13.2	0.8	20	1	US-08-469-630-12	Sequence 12, Appl	C 958	13	0.7	20	1	PCT-US95-12686-9	Sequence 9, Appli
C 886	13.2	0.8	20	1	US-08-943-667-18	Sequence 18, Appl	959	12.8	0.7	16	1	US-09-091-952A-72	Sequence 72, Appl
C 888	13.2	0.8	20	1	US-09-967-655-18	Sequence 18, Appl	960	12.8	0.7	16	1	US-09-765-400-23	Sequence 23, Appl
C 889	13.2	0.8	20	1	US-09-546-596A-52	Sequence 52, Appl	961	12.8	0.7	16	1	US-09-705-400-23	Sequence 23, Appl
C 890	13.2	0.8	20	1	US-09-895-585-8	Sequence 8, Appli	962	12.8	0.7	16	1	US-09-705-400-60	Sequence 60, Appl
C 891	13.2	0.8	20	1	US-09-574-779B-69	Sequence 69, Appl	C 963	12.8	0.7	16	1	US-07-752-101A-24	Sequence 24, Appl
C 892	13.2	0.8	20	1	US-09-917-963-36	Sequence 36, Appl	C 964	12.8	0.7	17	1	US-08-009-263C-29	Sequence 29, Appl
C 893	13.2	0.8	20	1	US-09-948-909-14	Sequence 14, Appl	C 965	12.8	0.7	17	1	US-08-373-124A-1337	Sequence 1337, Ap
C 894	13.2	0.8	20	1	US-09-948-909-46	Sequence 46, Appl	966	12.8	0.7	17	1	US-08-323-443B-6	Sequence 6, Appli
C 895	13.2	0.8	20	1	US-10-044-671-10	Sequence 10, Appl	967	12.8	0.7	17	1	US-08-435-628-1337	Sequence 1337, Ap
C 896	13.2	0.8	20	1	US-09-492-361-8	Sequence 8, Appli	968	12.8	0.7	17	1	US-08-292-620A-1675	Sequence 1675, Ap
C 897	13.2	0.8	20	1	PCT-US93-00977-221	Sequence 221, App	969	12.8	0.7	17	1	US-08-292-620A-1692	Sequence 1692, Ap
C 898	13.2	0.8	20	1	PCT-US93-02213-44	Sequence 44, Appl	971	12.8	0.7	17	1	US-08-292-620A-1973	Sequence 1973, Ap
C 899	13.2	0.8	20	1	PCT-US94-07770-44	Sequence 44, Appl	972	12.8	0.7	17	1	US-08-370-156-17	Sequence 17, Appl
C 900	13.2	0.8	20	1	PCT-US95-11233-14	Sequence 14, Appl	C 973	12.8	0.7	17	1	US-08-485-133-14	Sequence 14, Appl
C 901	13.2	0.8	20	1	PCT-US95-11233-34	Sequence 34, Appl	974	12.8	0.7	17	1	US-08-654-623-59	Sequence 59, Appl
C 902	13	0.7	15	1	US-08-291-932A-318	Sequence 318, App	C 975	12.8	0.7	17	1	US-08-641-291A-28	Sequence 28, Appl
C 903	13	0.7	15	1	US-09-043-123-5	Sequence 5, Appli	C 976	12.8	0.7	17	1	US-08-985-162-637	Sequence 637, App
C 904	13	0.7	15	1	US-09-475-947A-267	Sequence 267, App	C 977	12.8	0.7	17	1	US-08-658-136-8	Sequence 8, Appli
C 905	13	0.7	17	1	US-08-192-300-6	Sequence 6, Appli	C 978	12.8	0.7	17	1	US-08-658-136-57	Sequence 57, Appl
C 906	13	0.7	17	1	US-08-881-450A-15	Sequence 15, Appl	979	12.8	0.7	17	1	US-09-071-845-1675	Sequence 1675, Ap
C 907	13	0.7	17	1	US-08-584-040-4302	Sequence 4302, Ap	980	12.8	0.7	17	1	US-09-071-845-1692	Sequence 1692, Ap
C 908	13	0.7	17	1	US-08-584-040-7660	Sequence 7660, Ap	981	12.8	0.7	17	1	US-09-071-845-1973	Sequence 1973, Ap
C 909	13	0.7	17	1	US-08-584-040-7676	Sequence 7676, Ap	C 982	12.8	0.7	17	1	US-08-838-715B-29	Sequence 29, Appl

983	12.8	0.7	17	1	US-08-584-040-1831	Sequence 1831, Ap	1056	12.8	0.7	18	1	US-08-323-443B-8	Sequence 8, Appli
984	12.8	0.7	17	1	US-08-584-040-1996	Sequence 1996, Ap	ci057	12.8	0.7	18	1	US-08-363-585-75	Sequence 75, Appl
c 985	12.8	0.7	17	1	US-08-584-040-4361	Sequence 4361, Ap	ci058	12.8	0.7	18	1	US-08-363-585-99	Sequence 99, Appl
c 986	12.8	0.7	17	1	US-08-584-040-7577	Sequence 7577, Ap	ci059	12.8	0.7	18	1	US-08-350-993-18	Sequence 18, Appl
c 987	12.8	0.7	17	1	US-08-584-040-7578	Sequence 7578, Ap	ci060	12.8	0.7	18	1	US-08-309-512-50	Sequence 50, Appl
c 988	12.8	0.7	17	1	US-08-584-040-7626	Sequence 7626, Ap	ci061	12.8	0.7	18	1	US-08-132-168A-10	Sequence 10, Appl
989	12.8	0.7	17	1	US-09-160-496-5	Sequence 5, Appli	ci062	12.8	0.7	18	1	US-08-739-401A-1	Sequence 1, Appli
990	12.8	0.7	17	1	US-08-679-645-226	Sequence 226, App	ci063	12.8	0.7	18	1	US-09-205-922-60	Sequence 60, Appl
c 991	12.8	0.7	17	1	US-09-125-619-8	Sequence 8, Appli	ci064	12.8	0.7	18	1	US-09-205-204-15	Sequence 15, Appl
992	12.8	0.7	17	1	US-09-474-432B-477	Sequence 477, App	ci065	12.8	0.7	18	1	US-09-161-015-32	Sequence 32, Appl
993	12.8	0.7	17	1	US-09-474-432B-691	Sequence 691, App	ci066	12.8	0.7	18	1	US-09-197-008-13	Sequence 13, Appl
994	12.8	0.7	17	1	US-09-371-772B-376	Sequence 376, App	ci067	12.8	0.7	18	1	US-09-205-860-10	Sequence 10, Appl
995	12.8	0.7	17	1	US-09-371-772B-541	Sequence 541, App	ci068	12.8	0.7	18	1	US-08-743-637B-136	Sequence 136, App
c 996	12.8	0.7	17	1	US-09-371-772B-2128	Sequence 2128, Ap	ci069	12.8	0.7	18	1	US-08-857-946-14	Sequence 14, Appl
c 997	12.8	0.7	17	1	US-09-371-772B-3373	Sequence 3373, Ap	ci070	12.8	0.7	18	1	US-08-480-655-33	Sequence 33, Appl
c 998	12.8	0.7	17	1	US-09-371-772B-3374	Sequence 3374, Ap	ci071	12.8	0.7	18	1	US-08-526-840B-136	Sequence 136, App
c 999	12.8	0.7	17	1	US-09-371-772B-3418	Sequence 3418, Ap	ci072	12.8	0.7	18	1	US-09-156-253-18	Sequence 18, Appl
1000	12.8	0.7	17	1	US-09-371-772B-4833	Sequence 4833, Ap	ci073	12.8	0.7	18	1	US-09-156-253-20	Sequence 20, Appl
1001	12.8	0.7	17	1	US-09-371-772B-4834	Sequence 4834, Ap	ci074	12.8	0.7	18	1	US-09-205-921-8	Sequence 8, Appli
c1002	12.8	0.7	17	1	US-09-371-772B-5010	Sequence 5010, Ap	ci075	12.8	0.7	18	1	US-09-205-921-17	Sequence 17, Appl
c1003	12.8	0.7	17	1	US-09-371-772B-5011	Sequence 5011, Ap	ci076	12.8	0.7	18	1	US-08-970-740-14	Sequence 14, Appl
c1004	12.8	0.7	17	1	US-09-371-772B-5121	Sequence 5121, Ap	ci077	12.8	0.7	18	1	US-08-838-545-9	Sequence 9, Appli
c1005	12.8	0.7	17	1	US-09-371-772B-5122	Sequence 5122, Ap	ci078	12.8	0.7	18	1	US-08-658-136-10	Sequence 10, Appl
1006	12.8	0.7	17	1	US-09-371-772B-6679	Sequence 6679, Ap	ci079	12.8	0.7	18	1	US-09-289-466-79	Sequence 79, Appl
c1007	12.8	0.7	17	1	US-09-371-772B-6680	Sequence 6680, Ap	ci080	12.8	0.7	18	1	US-08-643-212-37	Sequence 37, Appl
1008	12.8	0.7	17	1	US-09-476-387-476	Sequence 476, App	ci081	12.8	0.7	18	1	US-09-323-424-4	Sequence 4, Appli
c1009	12.8	0.7	17	1	US-09-476-387-690	Sequence 690, App	ci082	12.8	0.7	18	1	US-09-455-683-33	Sequence 33, Appl
c1010	12.8	0.7	17	1	US-09-401-063-637	Sequence 637, App	ci083	12.8	0.7	18	1	US-09-349-533-9	Sequence 9, Appli
c1011	12.8	0.7	17	1	US-09-827-998-124	Sequence 124, App	ci084	12.8	0.7	18	1	US-09-496-694B-99	Sequence 99, Appl
c1012	12.8	0.7	17	1	US-09-827-998-125	Sequence 125, App	ci085	12.8	0.7	18	1	US-08-584-040-4500	Sequence 4500, Ap
c1013	12.8	0.7	17	1	US-09-827-998-126	Sequence 126, App	ci086	12.8	0.7	18	1	US-08-584-040-6250	Sequence 6250, Ap
c1014	12.8	0.7	17	1	US-09-827-998-127	Sequence 127, App	ci087	12.8	0.7	18	1	US-09-504-358-39	Sequence 39, Appl
1015	12.8	0.7	17	1	US-09-827-998-574	Sequence 574, App	ci088	12.8	0.7	18	1	US-09-205-995-18	Sequence 18, Appl
1016	12.8	0.7	17	1	US-09-827-998-577	Sequence 577, App	ci089	12.8	0.7	18	1	US-09-387-341-175	Sequence 175, App
c1017	12.8	0.7	17	1	US-09-875-318A-2	Sequence 2, Appli	ci090	12.8	0.7	18	1	US-09-954-314-39	Sequence 39, Appl
1018	12.8	0.7	17	1	US-09-866-108A-660	Sequence 660, App	ci091	12.8	0.7	18	1	US-09-475-947A-20	Sequence 20, Appl
1019	12.8	0.7	17	1	US-09-866-108A-661	Sequence 661, App	ci092	12.8	0.7	18	1	US-09-336-946B-42	Sequence 42, Appl
c1020	12.8	0.7	17	1	US-09-866-108A-1525	Sequence 1525, Ap	ci093	12.8	0.7	18	1	US-09-422-978-5796	Sequence 5796, Ap
c1021	12.8	0.7	17	1	US-09-866-108A-1527	Sequence 1527, Ap	ci094	12.8	0.7	18	1	US-09-422-978-9033	Sequence 9033, Ap
1022	12.8	0.7	17	1	US-09-866-108A-6007	Sequence 6007, Ap	ci095	12.8	0.7	18	1	US-09-371-772B-2213	Sequence 2213, Ap
1023	12.8	0.7	17	1	US-09-866-108A-6008	Sequence 6008, Ap	ci096	12.8	0.7	18	1	US-09-371-772B-3009	Sequence 3009, Ap
1024	12.8	0.7	17	1	US-09-866-108A-6009	Sequence 6009, Ap	ci097	12.8	0.7	18	1	US-09-585-174-25	Sequence 25, Appl
1025	12.8	0.7	17	1	US-09-866-108A-6010	Sequence 6010, Ap	ci098	12.8	0.7	18	1	US-09-696-791-4228	Sequence 4228, Ap
1026	12.8	0.7	17	1	US-09-866-108A-6258	Sequence 6258, Ap	ci099	12.8	0.7	18	1	US-09-696-791-4283	Sequence 4283, Ap
1027	12.8	0.7	17	1	US-09-866-108A-6259	Sequence 6259, Ap	ci100	12.8	0.7	18	1	US-10-230-562-39	Sequence 39, Appl
c1028	12.8	0.7	17	1	US-09-866-108A-6339	Sequence 6339, Ap	ci101	12.8	0.7	18	1	US-09-500-700-68	Sequence 68, Appl
c1029	12.8	0.7	17	1	US-09-866-108A-6340	Sequence 6340, Ap	ci102	12.8	0.7	18	1	US-08-473-020A-17	Sequence 17, Appl
c1030	12.8	0.7	17	1	US-09-866-108A-6341	Sequence 6341, Ap	ci103	12.8	0.7	19	1	US-08-631-200-39	Sequence 39, Appl
c1031	12.8	0.7	17	1	US-09-866-108A-6342	Sequence 6342, Ap	ci104	12.8	0.7	19	1	US-08-748-591-21	Sequence 21, Appl
c1032	12.8	0.7	17	1	US-09-866-108A-6794	Sequence 6794, Ap	ci105	12.8	0.7	19	1	US-08-913-976-28	Sequence 28, Appl
c1033	12.8	0.7	17	1	US-09-866-108A-6797	Sequence 6797, Ap	ci106	12.8	0.7	19	1	US-08-829-553-39	Sequence 39, Appl
c1034	12.8	0.7	17	1	US-09-866-108A-7036	Sequence 7036, Ap	ci107	12.8	0.7	19	1	US-08-922-267A-39	Sequence 39, Appl
c1035	12.8	0.7	17	1	US-09-866-108A-7037	Sequence 7037, Ap	ci108	12.8	0.7	19	1	US-08-936-707A-39	Sequence 39, Appl
c1036	12.8	0.7	17	1	US-09-866-108A-7530	Sequence 7530, Ap	ci109	12.8	0.7	19	1	US-08-936-706A-39	Sequence 39, Appl
c1037	12.8	0.7	17	1	US-09-866-108A-7531	Sequence 7531, Ap	ci110	12.8	0.7	19	1	US-08-665-259-53	Sequence 53, Appl
1038	12.8	0.7	17	1	US-09-866-108A-8044	Sequence 8044, Ap	ci111	12.8	0.7	19	1	US-08-762-500-53	Sequence 53, Appl
1039	12.8	0.7	17	1	US-09-866-108A-8046	Sequence 8046, Ap	ci112	12.8	0.7	19	1	US-08-750-064-19	Sequence 19, Appl
1040	12.8	0.7	17	1	US-09-866-108A-8303	Sequence 8303, Ap	ci113	12.8	0.7	19	1	US-09-248-203-39	Sequence 39, Appl
1041	12.8	0.7	17	1	US-09-866-108A-8304	Sequence 8304, Ap	ci114	12.8	0.7	19	1	US-08-851-843A-95	Sequence 95, Appl
1042	12.8	0.7	17	1	US-09-866-108A-8998	Sequence 8998, Ap	ci115	12.8	0.7	19	1	US-08-974-549A-387	Sequence 387, App
1043	12.8	0.7	17	1	US-09-866-108A-8999	Sequence 8999, Ap	ci116	12.8	0.7	19	1	US-08-960-780-84	Sequence 84, Appl
c1044	12.8	0.7	17	1	US-09-866-108A-9023	Sequence 9023, Ap	ci117	12.8	0.7	19	1	US-08-960-780-122	Sequence 122, App
c1045	12.8	0.7	17	1	US-09-866-108A-9024	Sequence 9024, Ap	ci118	12.8	0.7	19	1	US-09-406-071-39	Sequence 39, Appl
1046	12.8	0.7	17	1	US-09-866-108A-10009	Sequence 10009, A	ci119	12.8	0.7	19	1	US-09-102-491-9	Sequence 9, Appli
1047	12.8	0.7	17	1	US-09-866-108A-10011	Sequence 10011, A	ci120	12.8	0.7	19	1	US-09-073-898-84	Sequence 84, Appl
1048	12.8	0.7	17	1	US-09-866-108A-10403	Sequence 10403, A	ci121	12.8	0.7	19	1	US-09-073-898-122	Sequence 122, App
1049	12.8	0.7	17	1	US-09-866-108A-10404	Sequence 10404, A	ci122	12.8	0.7	19	1	US-08-854-050-95	Sequence 95, Appl
c1050	12.8	0.7	17	1	US-09-866-108A-10663	Sequence 10663, A	ci123	12.8	0.7	19	1	US-09-338-907-533	Sequence 533, App
c1051	12.8	0.7	17	1	US-09-866-108A-10665	Sequence 10665, A	ci124	12.8	0.7	19	1	US-09-313-183A-11	Sequence 11, Appl
c1052	12.8	0.7	17	1	US-10-222-566-8	Sequence 8, Appli	ci125	12.8	0.7	19	1	US-09-430-323-95	Sequence 95, Appl
c1053	12.8	0.7	17	1	US-10-143-024A-8	Sequence 8, Appli	ci126	12.8	0.7	19	1	US-09-218-207-533	Sequence 533, App
1054	12.8	0.7	17	1	US-08-319-492B-727	Sequence 727, App	ci127	12.8	0.7	19	1	US-08-913-951-154	Sequence 154, App
c1055	12.8	0.7	18	1	US-08-233-009-41	Sequence 41, Appl	ci128	12.8	0.7	19	1	US-09-422-978-4919	Sequence 4919, Ap

c1129	12.8	0.7	19	1	US-09-422-978-7743	Sequence 7743, Ap	c1202	12.6	0.7	19	1	US-09-672-717-38	Sequence 38, Appl
c1130	12.8	0.7	19	1	US-09-814-986-39	Sequence 39, Appl	1203	12.6	0.7	19	1	US-09-672-717-118	Sequence 118, App
c1131	12.8	0.7	19	1	US-09-402-181B-387	Sequence 387, App	1204	12.6	0.7	19	1	US-09-672-717-214	Sequence 214, App
c1132	12.8	0.7	19	1	US-09-721-456-387	Sequence 387, App	1205	12.6	0.7	19	1	US-09-818-780-80	Sequence 80, Appl
c1133	12.8	0.7	19	1	US-09-850-351A-84	Sequence 84, Appl	1206	12.6	0.7	19	1	US-08-983-605-78	Sequence 78, Appl
c1134	12.8	0.7	19	1	US-09-850-351A-122	Sequence 122, App	1207	12.6	0.7	19	1	US-09-696-791-166	Sequence 166, App
c1135	12.8	0.7	19	1	US-09-495-714C-47	Sequence 47, Appl	1208	12.6	0.7	19	1	US-09-696-791-218	Sequence 218, App
c1136	12.8	0.7	19	1	US-09-155-885A-55	Sequence 55, Appl	1209	12.6	0.7	19	1	US-09-696-791-219	Sequence 219, App
c1137	12.8	0.7	19	1	US-09-686-791-215	Sequence 215, App	1210	12.6	0.7	19	1	US-09-696-791-226	Sequence 226, App
c1138	12.8	0.7	19	1	US-09-696-791-300	Sequence 300, App	1211	12.6	0.7	19	1	US-09-696-791-238	Sequence 238, App
c1139	12.8	0.7	19	1	US-09-696-791-301	Sequence 301, App	1212	12.6	0.7	19	1	US-09-696-791-239	Sequence 239, App
c1140	12.8	0.7	19	1	US-09-696-791-326	Sequence 326, App	1213	12.6	0.7	19	1	US-09-696-791-314	Sequence 314, App
c1141	12.8	0.7	19	1	US-09-696-791-17	Sequence 717, App	1214	12.6	0.7	19	1	US-09-696-791-346	Sequence 346, App
c1142	12.8	0.7	19	1	US-09-696-791-718	Sequence 718, App	1215	12.6	0.7	19	1	US-09-696-791-353	Sequence 353, App
c1143	12.8	0.7	19	1	US-09-686-791-2018	Sequence 2018, Ap	1216	12.6	0.7	19	1	US-09-696-791-359	Sequence 359, App
c1144	12.8	0.7	19	1	US-09-696-791-2019	Sequence 2019, Ap	1217	12.6	0.7	19	1	US-09-696-791-472	Sequence 472, App
c1145	12.8	0.7	19	1	US-09-696-791-2474	Sequence 2474, Ap	1218	12.6	0.7	19	1	US-09-696-791-539	Sequence 539, App
c1146	12.8	0.7	19	1	US-09-696-791-2971	Sequence 2971, Ap	1219	12.6	0.7	19	1	US-09-696-791-539	Sequence 539, App
c1147	12.8	0.7	19	1	US-09-696-791-2972	Sequence 2972, Ap	1220	12.6	0.7	19	1	US-09-696-791-567	Sequence 567, App
c1148	12.8	0.7	19	1	US-09-696-791-2973	Sequence 2973, Ap	1221	12.6	0.7	19	1	US-09-696-791-720	Sequence 720, App
c1149	12.8	0.7	19	1	US-09-686-791-3579	Sequence 3579, Ap	1222	12.6	0.7	19	1	US-09-696-791-979	Sequence 979, App
c1150	12.6	0.7	18	1	US-09-163-485-22	Sequence 22, Appl	1223	12.6	0.7	19	1	US-09-696-791-981	Sequence 981, App
c1151	12.6	0.7	19	1	US-09-696-791-2050	Sequence 2050, Ap	1224	12.6	0.7	19	1	US-09-696-791-1220	Sequence 1220, App
c1152	12.6	0.7	19	1	US-07-922-723A-21	Sequence 21, Appl	1225	12.6	0.7	19	1	US-09-696-791-1920	Sequence 1920, Ap
c1153	12.6	0.7	19	1	US-07-799-828C-21	Sequence 21, Appl	1226	12.6	0.7	19	1	US-09-696-791-1957	Sequence 1957, Ap
c1154	12.6	0.7	19	1	US-08-474-542A-80	Sequence 80, Appl	1227	12.6	0.7	19	1	US-09-696-791-2010	Sequence 2010, Ap
c1155	12.6	0.7	19	1	US-08-079-110A-6	Sequence 6, Appl	1228	12.6	0.7	19	1	US-09-696-791-2367	Sequence 2367, Ap
c1156	12.6	0.7	19	1	US-08-222-177A-381	Sequence 381, App	1229	12.6	0.7	19	1	US-09-696-791-2368	Sequence 2368, Ap
c1157	12.6	0.7	19	1	US-08-379-078-706	Sequence 706, App	1230	12.6	0.7	19	1	US-09-696-791-2541	Sequence 2541, Ap
c1158	12.6	0.7	19	1	US-08-457-648-80	Sequence 80, Appl	1231	12.6	0.7	19	1	US-09-696-791-2543	Sequence 2543, Ap
c1159	12.6	0.7	19	1	US-08-196-630A-7	Sequence 7, Appl	1232	12.6	0.7	19	1	US-09-696-791-2656	Sequence 2656, Ap
c1160	12.6	0.7	19	1	US-08-356-287-24	Sequence 24, Appl	1233	12.6	0.7	19	1	US-09-696-791-3002	Sequence 3002, Ap
c1161	12.6	0.7	19	1	US-08-271-880A-44	Sequence 44, Appl	1234	12.6	0.7	19	1	US-09-696-791-3129	Sequence 3129, Ap
c1162	12.6	0.7	19	1	US-08-221-816B-17	Sequence 17, Appl	1235	12.6	0.7	19	1	US-09-696-791-3185	Sequence 3185, Ap
c1163	12.6	0.7	19	1	US-08-709-733-12	Sequence 12, Appl	1236	12.6	0.7	19	1	US-09-696-791-3578	Sequence 3578, Ap
c1164	12.6	0.7	19	1	US-08-359-705B-22	Sequence 22, Appl	1237	12.6	0.7	19	1	US-09-696-791-3590	Sequence 3590, Ap
c1165	12.6	0.7	19	1	US-08-450-905B-131	Sequence 131, App	1238	12.6	0.7	19	1	US-09-696-791-3644	Sequence 3644, Ap
c1166	12.6	0.7	19	1	US-07-952-277A-21	Sequence 21, Appl	1239	12.6	0.7	19	1	US-09-696-791-3729	Sequence 3729, Ap
c1167	12.6	0.7	19	1	US-08-286-846A-22	Sequence 22, Appl	1240	12.6	0.7	19	1	US-10-109-368-17	Sequence 17, Appl
c1168	12.6	0.7	19	1	US-08-500-860A-10	Sequence 10, Appl	1241	12.6	0.7	19	1	PCT-US93-00977-288	Sequence 288, App
c1169	12.6	0.7	19	1	US-08-855-449A-18	Sequence 18, Appl	1242	12.6	0.7	20	1	PCT-US93-04863-24	Sequence 24, Appl
c1170	12.6	0.7	19	1	US-08-457-880A-22	Sequence 22, Appl	1243	12.6	0.7	20	1	US-09-679-299A-53	Sequence 53, Appl
c1171	12.6	0.7	19	1	US-08-649-991-33	Sequence 33, Appl	1244	12.6	0.7	22	1	US-08-232-081B-10	Sequence 10, Appl
c1172	12.6	0.7	19	1	US-08-910-408-44	Sequence 44, Appl	1245	12.6	0.7	23	1	US-09-647-344A-3	Sequence 3, Appl
c1173	12.6	0.7	19	1	US-08-444-622A-22	Sequence 22, Appl	1246	12.4	0.7	14	1	US-08-985-162-1803	Sequence 1803, Ap
c1174	12.6	0.7	19	1	US-08-942-562-22	Sequence 22, Appl	1247	12.4	0.7	14	1	US-09-230-652-38	Sequence 38, Appl
c1175	12.6	0.7	19	1	US-07-982-759F-131	Sequence 131, App	1248	12.4	0.7	14	1	US-09-401-063-1803	Sequence 1803, Ap
c1176	12.6	0.7	19	1	US-08-573-186-6	Sequence 6, Appl	1249	12.4	0.7	15	1	US-08-221-816B-22	Sequence 22, Appl
c1177	12.6	0.7	19	1	US-09-156-923-22	Sequence 22, Appl	1250	12.4	0.7	15	1	US-08-590-897A-32	Sequence 32, Appl
c1178	12.6	0.7	19	1	US-09-249-215-44	Sequence 44, Appl	1251	12.4	0.7	15	1	US-10-112-547-22	Sequence 22, Appl
c1179	12.6	0.7	19	1	US-09-553-794-2	Sequence 2, Appl	1252	12.4	0.7	15	1	US-10-112-241-22	Sequence 22, Appl
c1180	12.6	0.7	19	1	US-09-353-434-14	Sequence 14, Appl	1253	12.4	0.7	15	1	US-10-104-611-22	Sequence 22, Appl
c1181	12.6	0.7	19	1	US-07-974-409C-288	Sequence 288, App	1254	12.4	0.7	15	1	US-10-109-368-22	Sequence 22, Appl
c1182	12.6	0.7	19	1	US-09-546-990-4	Sequence 4, Appl	1255	12.4	0.7	16	1	US-08-281-106-43	Sequence 43, Appl
c1183	12.6	0.7	19	1	US-09-545-435-2	Sequence 2, Appl	1256	12.4	0.7	16	1	US-09-199-269-43	Sequence 43, Appl
c1184	12.6	0.7	19	1	US-09-614-034-135	Sequence 135, App	1257	12.4	0.7	16	1	US-09-371-772B-5851	Sequence 5851, Ap
c1185	12.6	0.7	19	1	US-09-649-747A-75	Sequence 75, Appl	1258	12.4	0.7	17	1	US-08-196-218-27	Sequence 27, Appl
c1186	12.6	0.7	19	1	US-09-422-978-4414	Sequence 4414, Ap	1259	12.4	0.7	17	1	US-08-373-124A-944	Sequence 944, App
c1187	12.6	0.7	19	1	US-09-422-978-5162	Sequence 5162, Ap	1260	12.4	0.7	17	1	US-08-250-740-21	Sequence 21, Appl
c1188	12.6	0.7	19	1	US-09-422-978-5182	Sequence 5182, Ap	1261	12.4	0.7	17	1	US-08-681-953-27	Sequence 27, Appl
c1189	12.6	0.7	19	1	US-09-422-978-6575	Sequence 6575, Ap	1262	12.4	0.7	17	1	US-08-244-468-4	Sequence 4, Appl
c1190	12.6	0.7	19	1	US-09-422-978-6717	Sequence 6717, Ap	1263	12.4	0.7	17	1	US-07-695-472B-27	Sequence 27, Appl
c1191	12.6	0.7	19	1	US-09-422-978-7357	Sequence 7357, Ap	1264	12.4	0.7	17	1	US-08-435-628-944	Sequence 944, App
c1192	12.6	0.7	19	1	US-09-422-978-7573	Sequence 7573, Ap	1265	12.4	0.7	17	1	US-08-698-805-10	Sequence 10, Appl
c1193	12.6	0.7	19	1	US-09-422-978-11512	Sequence 11512, A	1266	12.4	0.7	17	1	US-08-933-749-9	Sequence 9, Appl
c1194	12.6	0.7	19	1	US-09-060-299-387	Sequence 387, App	1267	12.4	0.7	17	1	US-08-985-162-220	Sequence 220, App
c1195	12.6	0.7	19	1	US-09-060-299-401	Sequence 401, App	1268	12.4	0.7	17	1	US-08-985-162-221	Sequence 221, App
c1196	12.6	0.7	19	1	US-09-402-923A-387	Sequence 387, App	1269	12.4	0.7	17	1	US-08-913-833-68	Sequence 68, Appl
c1197	12.6	0.7	19	1	US-09-402-923A-401	Sequence 401, App	1270	12.4	0.7	17	1	US-08-988-099-43	Sequence 43, Appl
c1198	12.6	0.7	19	1	US-10-112-547-17	Sequence 17, Appl	1271	12.4	0.7	17	1	US-08-988-099-52	Sequence 52, Appl
c1199	12.6	0.7	19	1	US-10-112-241-17	Sequence 17, Appl	1272	12.4	0.7	17	1	US-09-235-583-9	Sequence 9, Appl
c1200	12.6	0.7	19	1	US-10-104-611-17	Sequence 17, Appl	1273	12.4	0.7	17	1	US-09-599-164-9	Sequence 9, Appl
c1201	12.6	0.7	19	1	US-09-672-717-17	Sequence 17, Appl	1274	12.4	0.7	17	1	US-09-580-794C-68	Sequence 68, Appl

c1275	12.4	0.7	17	1	US-08-584-040-3878	Sequence 3878, Ap	cl348	12.4	0.7	18	1	US-09-082-664-4	Sequence 4, Appli
1276	12.4	0.7	17	1	US-08-584-040-4220	Sequence 4220, Ap	1349	12.4	0.7	18	1	US-08-488-214A-57	Sequence 57, Appl
c1277	12.4	0.7	17	1	US-08-584-040-7628	Sequence 7628, Ap	1350	12.4	0.7	18	1	US-08-488-208A-57	Sequence 57, Appl
c1278	12.4	0.7	17	1	US-08-679-645-856	Sequence 856, Ap	1351	12.4	0.7	18	1	US-09-213-713-70	Sequence 70, Appl
c1279	12.4	0.7	17	1	US-08-679-645-858	Sequence 858, Ap	1352	12.4	0.7	18	1	US-09-487-444-38	Sequence 38, Appl
c1280	12.4	0.7	17	1	US-08-220-602B-13	Sequence 13, Appl	1353	12.4	0.7	18	1	US-09-038-073-2507	Sequence 2507, Ap
c1281	12.4	0.7	17	1	US-09-474-432B-623	Sequence 623, Ap	1354	12.4	0.7	18	1	US-09-311-260-67	Sequence 67, Appl
c1282	12.4	0.7	17	1	US-09-474-432B-758	Sequence 758, Ap	1355	12.4	0.7	18	1	US-09-193-377B-22	Sequence 22, Appl
c1283	12.4	0.7	17	1	US-09-474-432B-884	Sequence 884, Ap	1356	12.4	0.7	18	1	US-09-193-377B-24	Sequence 24, Appl
c1284	12.4	0.7	17	1	US-09-106-375-27	Sequence 27, Appl	1357	12.4	0.7	18	1	US-09-193-377B-27	Sequence 27, Appl
c1285	12.4	0.7	17	1	US-09-371-772B-1645	Sequence 1645, Ap	1358	12.4	0.7	18	1	US-09-099-307-12	Sequence 12, Appl
c1286	12.4	0.7	17	1	US-09-371-772B-1987	Sequence 1987, Ap	1359	12.4	0.7	18	1	US-09-099-307-13	Sequence 13, Appl
c1287	12.4	0.7	17	1	US-09-371-772B-3420	Sequence 3420, Ap	1360	12.4	0.7	18	1	US-09-430-911A-6	Sequence 6, Appli
c1288	12.4	0.7	17	1	US-09-476-387-622	Sequence 622, Ap	1361	12.4	0.7	18	1	US-09-632-580A-15	Sequence 15, Appl
c1289	12.4	0.7	17	1	US-09-476-387-757	Sequence 757, Ap	1362	12.4	0.7	18	1	US-09-196-387-6	Sequence 6, Appli
c1290	12.4	0.7	17	1	US-09-476-387-883	Sequence 883, Ap	1363	12.4	0.7	18	1	US-09-430-921A-6	Sequence 6, Appli
c1291	12.4	0.7	17	1	US-09-401-063-220	Sequence 220, Ap	1364	12.4	0.7	18	1	US-08-483-211A-57	Sequence 57, Appl
c1292	12.4	0.7	17	1	US-09-401-063-221	Sequence 221, Ap	1365	12.4	0.7	18	1	US-08-488-223A-57	Sequence 57, Appl
c1293	12.4	0.7	17	1	US-09-827-998-547	Sequence 547, Ap	1366	12.4	0.7	18	1	US-08-679-645-1157	Sequence 1157, Ap
c1294	12.4	0.7	17	1	US-09-866-108A-65	Sequence 65, Appl	1367	12.4	0.7	18	1	US-08-679-645-1159	Sequence 1159, Ap
c1295	12.4	0.7	17	1	US-09-866-108A-69	Sequence 69, Appl	1368	12.4	0.7	18	1	US-08-438-431A-57	Sequence 57, Appl
c1296	12.4	0.7	17	1	US-09-866-108A-517	Sequence 517, Ap	1369	12.4	0.7	18	1	US-08-488-225A-57	Sequence 57, Appl
c1297	12.4	0.7	17	1	US-09-866-108A-518	Sequence 518, Ap	1370	12.4	0.7	18	1	US-08-559-390-263	Sequence 263, App
c1298	12.4	0.7	17	1	US-09-866-108A-519	Sequence 519, Ap	1371	12.4	0.7	18	1	US-09-841-833-6	Sequence 6, Appli
c1299	12.4	0.7	17	1	US-09-866-108A-520	Sequence 520, Ap	1372	12.4	0.7	18	1	US-09-187-330-7	Sequence 7, Appli
c1300	12.4	0.7	17	1	US-09-866-108A-2181	Sequence 2181, Ap	1373	12.4	0.7	18	1	US-09-489-855-9	Sequence 9, Appli
c1301	12.4	0.7	17	1	US-09-866-108A-2182	Sequence 2182, Ap	1374	12.4	0.7	18	1	US-09-765-111A-30	Sequence 30, Appl
c1302	12.4	0.7	17	1	US-09-866-108A-2183	Sequence 2183, Ap	1375	12.4	0.7	18	1	US-09-856-662-87	Sequence 87, Appl
c1303	12.4	0.7	17	1	US-09-866-108A-2184	Sequence 2184, Ap	1376	12.4	0.7	18	1	PCT-US91-03056-6	Sequence 6, Appli
c1304	12.4	0.7	17	1	US-09-866-108A-7034	Sequence 7034, Ap	1377	12.4	0.7	18	1	PCT-US92-00626-2	Sequence 2, Appli
c1305	12.4	0.7	17	1	US-09-866-108A-7035	Sequence 7035, Ap	1378	12.4	0.7	18	1	PCT-US93-11198-263	Sequence 263, App
c1306	12.4	0.7	17	1	US-09-866-108A-7753	Sequence 7753, Ap	1379	12.4	0.7	19	1	US-08-631-200-20	Sequence 20, Appl
c1307	12.4	0.7	17	1	US-09-866-108A-7754	Sequence 7754, Ap	1380	12.4	0.7	19	1	US-08-363-233B-7	Sequence 7, Appli
c1308	12.4	0.7	17	1	US-09-866-108A-7755	Sequence 7755, Ap	1381	12.4	0.7	19	1	US-08-363-233B-8	Sequence 8, Appli
c1309	12.4	0.7	17	1	US-09-866-108A-7756	Sequence 7756, Ap	1382	12.4	0.7	19	1	US-08-446-919A-12	Sequence 12, Appl
c1310	12.4	0.7	17	1	US-09-866-108A-8001	Sequence 8001, Ap	1383	12.4	0.7	19	1	US-08-829-553-20	Sequence 20, Appl
c1311	12.4	0.7	17	1	US-09-866-108A-8002	Sequence 8002, Ap	1384	12.4	0.7	19	1	US-08-117-952-247	Sequence 247, App
c1312	12.4	0.7	17	1	US-09-866-108A-8003	Sequence 8003, Ap	1385	12.4	0.7	19	1	US-08-117-952-384	Sequence 384, App
c1313	12.4	0.7	17	1	US-09-866-108A-8004	Sequence 8004, Ap	1386	12.4	0.7	19	1	US-08-922-267A-20	Sequence 20, Appl
c1314	12.4	0.7	17	1	US-09-866-108A-8047	Sequence 8047, Ap	1387	12.4	0.7	19	1	US-08-936-707A-20	Sequence 20, Appl
c1315	12.4	0.7	17	1	US-09-866-108A-8048	Sequence 8048, Ap	1388	12.4	0.7	19	1	US-08-936-706A-20	Sequence 20, Appl
c1316	12.4	0.7	17	1	US-09-866-108A-8377	Sequence 8377, Ap	1389	12.4	0.7	19	1	US-09-248-203-20	Sequence 20, Appl
c1317	12.4	0.7	17	1	US-09-866-108A-8378	Sequence 8378, Ap	1390	12.4	0.7	19	1	US-08-894-173-9	Sequence 9, Appli
c1318	12.4	0.7	17	1	US-09-866-108A-8379	Sequence 8379, Ap	1391	12.4	0.7	19	1	US-09-050-153-27	Sequence 27, Appl
c1319	12.4	0.7	17	1	US-09-866-108A-8380	Sequence 8380, Ap	1392	12.4	0.7	19	1	US-09-398-193-9	Sequence 9, Appli
c1320	12.4	0.7	17	1	US-09-866-108A-8593	Sequence 8593, Ap	1393	12.4	0.7	19	1	US-09-406-071-20	Sequence 20, Appl
c1321	12.4	0.7	17	1	US-09-866-108A-8594	Sequence 8594, Ap	1394	12.4	0.7	19	1	US-09-091-952A-162	Sequence 162, App
c1322	12.4	0.7	17	1	US-09-866-108A-8595	Sequence 8595, Ap	1395	12.4	0.7	19	1	US-09-402-690-15	Sequence 15, Appl
c1323	12.4	0.7	17	1	US-09-866-108A-8596	Sequence 8596, Ap	1396	12.4	0.7	19	1	US-09-446-081-6	Sequence 6, Appli
c1324	12.4	0.7	17	1	US-09-866-108A-8895	Sequence 8895, Ap	1397	12.4	0.7	19	1	US-09-422-978-5164	Sequence 5164, Ap
c1325	12.4	0.7	17	1	US-09-866-108A-8899	Sequence 8899, Ap	1398	12.4	0.7	19	1	US-09-422-978-5816	Sequence 5816, Ap
c1326	12.4	0.7	17	1	US-09-861-012A-13	Sequence 13, Appl	1399	12.4	0.7	19	1	US-09-422-978-8728	Sequence 8728, Ap
c1327	12.4	0.7	17	1	US-09-943-983C-68	Sequence 68, Appl	1400	12.4	0.7	19	1	US-09-230-652-92	Sequence 92, Appl
c1328	12.4	0.7	17	1	PCT-US94-08119-13	Sequence 13, Appl	1401	12.4	0.7	19	1	US-09-755-665-74	Sequence 74, Appl
c1329	12.4	0.7	17	1	PCT-US94-12913A-13	Sequence 13, Appl	1402	12.4	0.7	19	1	US-09-785-381-7	Sequence 7, Appli
c1330	12.4	0.7	18	1	US-08-584-040-6250	Sequence 6250, Ap	1403	12.4	0.7	19	1	US-09-814-986-20	Sequence 20, Appl
c1331	12.4	0.7	18	1	US-09-371-772B-3009	Sequence 3009, Ap	1404	12.4	0.7	19	1	US-09-696-791-321	Sequence 321, App
c1332	12.4	0.7	18	1	US-08-369-282-2	Sequence 2, Appli	1405	12.4	0.7	19	1	US-09-696-791-322	Sequence 322, App
c1333	12.4	0.7	18	1	US-08-216-278A-6	Sequence 6, Appli	1406	12.4	0.7	19	1	US-09-696-791-719	Sequence 719, App
c1334	12.4	0.7	18	1	US-08-488-212A-15	Sequence 15, Appl	1407	12.4	0.7	19	1	US-09-896-791-854	Sequence 854, App
c1335	12.4	0.7	18	1	US-08-411-796-263	Sequence 263, App	1408	12.4	0.7	19	1	US-09-896-765A-86	Sequence 86, Appl
c1336	12.4	0.7	18	1	US-08-585-684B-2507	Sequence 2507, Ap	1409	12.2	0.7	17	1	US-09-866-108A-9023	Sequence 9023, Ap
c1337	12.4	0.7	18	1	US-08-320-306-15	Sequence 15, Appl	1410	12.2	0.7	17	1	US-08-009-263C-37	Sequence 37, Appl
c1338	12.4	0.7	18	1	US-08-488-209B-15	Sequence 15, Appl	1411	12.2	0.7	17	1	US-08-217-016-3	Sequence 3, Appli
c1339	12.4	0.7	18	1	US-08-408-011-15	Sequence 15, Appl	1412	12.2	0.7	17	1	US-08-061-062A-12	Sequence 12, Appl
c1340	12.4	0.7	18	1	US-08-584-322A-6	Sequence 6, Appli	1413	12.2	0.7	17	1	US-08-050-073-175	Sequence 175, App
c1341	12.4	0.7	18	1	US-09-255-911-28	Sequence 28, Appl	1414	12.2	0.7	17	1	US-08-337-268A-12	Sequence 12, Appl
c1342	12.4	0.7	18	1	US-09-289-376-19	Sequence 19, Appl	1415	12.2	0.7	17	1	US-08-344-695-20	Sequence 20, Appl
c1343	12.4	0.7	18	1	US-08-471-039-263	Sequence 263, App	1416	12.2	0.7	17	1	US-08-344-695-21	Sequence 21, Appl
c1344	12.4	0.7	18	1	US-09-339-964-32	Sequence 32, Appl	1417	12.2	0.7	17	1	US-07-882-838E-12	Sequence 12, Appl
c1345	12.4	0.7	18	1	US-08-485-942A-57	Sequence 57, Appl	1418	12.2	0.7	17	1	US-08-373-124A-224	Sequence 224, App
c1346	12.4	0.7	18	1	US-09-143-212-44	Sequence 44, Appl	1419	12.2	0.7	17	1	US-08-664-443-15	Sequence 15, Appl
c1347	12.4	0.7	18	1	US-08-559-203-14	Sequence 14, Appl	1420	12.2	0.7	17	1	US-08-484-570A-12	Sequence 12, Appl

1421	12.2	0.7	17	1	US-08-758-306-825	Sequence 825, App	c1494	12.2	0.7	17	1	US-09-371-772B-6747	Sequence 6747, Ap
1422	12.2	0.7	17	1	US-08-758-306-849	Sequence 849, App	c1495	12.2	0.7	17	1	US-09-371-772B-6957	Sequence 6957, Ap
1423	12.2	0.7	17	1	US-08-435-628-224	Sequence 224, App	1496	12.2	0.7	17	1	US-08-465-679-67	Sequence 67, Appl
1424	12.2	0.7	17	1	US-08-292-620A-1672	Sequence 1672, Ap	c1497	12.2	0.7	17	1	US-09-476-387-313	Sequence 313, App
1425	12.2	0.7	17	1	US-08-292-620A-1676	Sequence 1676, Ap	1498	12.2	0.7	17	1	US-09-476-387-492	Sequence 492, App
1426	12.2	0.7	17	1	US-08-292-620A-1770	Sequence 1770, Ap	c1499	12.2	0.7	17	1	US-09-476-387-573	Sequence 573, App
1427	12.2	0.7	17	1	US-08-292-620A-1809	Sequence 1809, Ap	1500	12.2	0.7	17	1	US-09-476-387-771	Sequence 771, App
1428	12.2	0.7	17	1	US-08-332-766A-94	Sequence 94, Appl	1501	12.2	0.7	17	1	US-09-476-387-849	Sequence 849, App
1429	12.2	0.7	17	1	US-08-468-819-63	Sequence 63, Appl	c1502	12.2	0.7	17	1	US-09-401-063-67	Sequence 67, Appl
1430	12.2	0.7	17	1	US-08-464-276-3	Sequence 3, Appl	1503	12.2	0.7	17	1	US-09-401-063-144	Sequence 144, App
1431	12.2	0.7	17	1	US-08-909-742-3	Sequence 3, Appl	1504	12.2	0.7	17	1	US-09-401-063-173	Sequence 173, App
1432	12.2	0.7	17	1	US-08-909-742-4	Sequence 4, Appl	1505	12.2	0.7	17	1	US-09-401-063-174	Sequence 174, App
1433	12.2	0.7	17	1	US-08-536-150-12	Sequence 12, Appl	c1506	12.2	0.7	17	1	US-09-401-063-243	Sequence 243, App
1434	12.2	0.7	17	1	US-08-985-162-67	Sequence 67, Appl	c1507	12.2	0.7	17	1	US-09-401-063-253	Sequence 253, App
1435	12.2	0.7	17	1	US-08-985-162-144	Sequence 144, App	c1508	12.2	0.7	17	1	US-09-401-063-397	Sequence 397, App
1436	12.2	0.7	17	1	US-08-985-162-173	Sequence 173, App	c1509	12.2	0.7	17	1	US-09-401-063-514	Sequence 514, App
1437	12.2	0.7	17	1	US-08-985-162-174	Sequence 174, App	c1510	12.2	0.7	17	1	US-09-827-998-412	Sequence 412, App
1438	12.2	0.7	17	1	US-08-985-162-243	Sequence 243, App	1511	12.2	0.7	17	1	US-09-827-998-573	Sequence 573, App
1439	12.2	0.7	17	1	US-08-985-162-253	Sequence 253, App	1512	12.2	0.7	17	1	US-09-827-998-655	Sequence 655, App
1440	12.2	0.7	17	1	US-08-985-162-397	Sequence 397, App	c1513	12.2	0.7	17	1	US-09-827-998-720	Sequence 720, App
1441	12.2	0.7	17	1	US-08-985-162-514	Sequence 514, App	1514	12.2	0.7	17	1	US-09-866-108A-402	Sequence 402, App
1442	12.2	0.7	17	1	US-08-998-099-47	Sequence 47, Appl	1515	12.2	0.7	17	1	US-09-866-108A-658	Sequence 658, App
1443	12.2	0.7	17	1	US-08-998-099-48	Sequence 48, Appl	1516	12.2	0.7	17	1	US-09-866-108A-659	Sequence 659, App
1444	12.2	0.7	17	1	US-08-998-099-49	Sequence 49, Appl	1517	12.2	0.7	17	1	US-09-866-108A-700	Sequence 700, App
1445	12.2	0.7	17	1	US-09-071-845-1672	Sequence 1672, Ap	1518	12.2	0.7	17	1	US-09-866-108A-744	Sequence 744, App
1446	12.2	0.7	17	1	US-09-071-845-1676	Sequence 1676, Ap	1519	12.2	0.7	17	1	US-09-866-108A-745	Sequence 745, App
1447	12.2	0.7	17	1	US-09-071-845-1770	Sequence 1770, Ap	1520	12.2	0.7	17	1	US-09-866-108A-747	Sequence 747, App
1448	12.2	0.7	17	1	US-09-071-845-1809	Sequence 1809, Ap	1521	12.2	0.7	17	1	US-09-866-108A-748	Sequence 748, App
1449	12.2	0.7	17	1	US-08-838-715B-37	Sequence 37, Appl	c1522	12.2	0.7	17	1	US-09-866-108A-948	Sequence 948, App
1450	12.2	0.7	17	1	US-09-326-135-3	Sequence 3, Appl	c1523	12.2	0.7	17	1	US-09-866-108A-949	Sequence 949, App
1451	12.2	0.7	17	1	US-09-412-289-3	Sequence 4, Appl	c1524	12.2	0.7	17	1	US-09-866-108A-950	Sequence 950, App
1452	12.2	0.7	17	1	US-09-412-289-4	Sequence 4, Appl	c1525	12.2	0.7	17	1	US-09-866-108A-1524	Sequence 1524, Ap
1453	12.2	0.7	17	1	US-08-584-040-2376	Sequence 2376, Ap	c1526	12.2	0.7	17	1	US-09-866-108A-1528	Sequence 1528, Ap
1454	12.2	0.7	17	1	US-08-584-040-2386	Sequence 2386, Ap	1527	12.2	0.7	17	1	US-09-866-108A-1886	Sequence 1886, Ap
1455	12.2	0.7	17	1	US-08-584-040-2742	Sequence 2742, Ap	c1528	12.2	0.7	17	1	US-09-866-108A-1896	Sequence 1896, Ap
1456	12.2	0.7	17	1	US-08-584-040-3820	Sequence 3820, Ap	c1529	12.2	0.7	17	1	US-09-866-108A-2265	Sequence 2265, Ap
1457	12.2	0.7	17	1	US-08-584-040-3890	Sequence 3890, Ap	c1530	12.2	0.7	17	1	US-09-866-108A-2311	Sequence 2311, Ap
1458	12.2	0.7	17	1	US-08-584-040-4233	Sequence 4233, Ap	1531	12.2	0.7	17	1	US-09-866-108A-2734	Sequence 2734, Ap
1459	12.2	0.7	17	1	US-08-584-040-4362	Sequence 4362, Ap	c1532	12.2	0.7	17	1	US-09-866-108A-2899	Sequence 2899, Ap
1460	12.2	0.7	17	1	US-08-584-040-5795	Sequence 5795, Ap	c1533	12.2	0.7	17	1	US-09-866-108A-2900	Sequence 2900, Ap
1461	12.2	0.7	17	1	US-08-584-040-7493	Sequence 7493, Ap	c1534	12.2	0.7	17	1	US-09-866-108A-2901	Sequence 2901, Ap
1462	12.2	0.7	17	1	US-08-584-040-8024	Sequence 8024, Ap	c1535	12.2	0.7	17	1	US-09-866-108A-5874	Sequence 5874, Ap
1463	12.2	0.7	17	1	US-08-679-645-70	Sequence 70, Appl	c1536	12.2	0.7	17	1	US-09-866-108A-6338	Sequence 6338, Ap
1464	12.2	0.7	17	1	US-08-679-645-153	Sequence 153, App	c1537	12.2	0.7	17	1	US-09-866-108A-6379	Sequence 6379, Ap
1465	12.2	0.7	17	1	US-08-679-645-200	Sequence 200, App	c1538	12.2	0.7	17	1	US-09-866-108A-6380	Sequence 6380, Ap
1466	12.2	0.7	17	1	US-08-679-645-200	Sequence 200, App	c1539	12.2	0.7	17	1	US-09-866-108A-6381	Sequence 6381, Ap
1467	12.2	0.7	17	1	US-08-294-312B-67	Sequence 67, Appl	c1540	12.2	0.7	17	1	US-09-866-108A-6382	Sequence 6382, Ap
1468	12.2	0.7	17	1	US-09-235-538-5	Sequence 5, Appl	c1541	12.2	0.7	17	1	US-09-866-108A-6405	Sequence 6405, Ap
1469	12.2	0.7	17	1	US-08-468-024B-67	Sequence 67, Appl	c1542	12.2	0.7	17	1	US-09-866-108A-6793	Sequence 6793, Ap
1470	12.2	0.7	17	1	US-09-213-383-63	Sequence 63, Appl	c1543	12.2	0.7	17	1	US-09-866-108A-7038	Sequence 7038, Ap
1471	12.2	0.7	17	1	US-09-474-432B-314	Sequence 314, App	c1544	12.2	0.7	17	1	US-09-866-108A-7052	Sequence 7052, Ap
1472	12.2	0.7	17	1	US-09-474-432B-493	Sequence 493, App	1545	12.2	0.7	17	1	US-09-866-108A-7841	Sequence 7841, Ap
1473	12.2	0.7	17	1	US-09-474-432B-574	Sequence 574, App	c1546	12.2	0.7	17	1	US-09-866-108A-8010	Sequence 8010, Ap
1474	12.2	0.7	17	1	US-09-474-432B-772	Sequence 772, App	1547	12.2	0.7	17	1	US-09-866-108A-8042	Sequence 8042, Ap
1475	12.2	0.7	17	1	US-09-474-432B-850	Sequence 850, App	1548	12.2	0.7	17	1	US-09-866-108A-8043	Sequence 8043, Ap
1476	12.2	0.7	17	1	US-09-371-772B-921	Sequence 921, App	1549	12.2	0.7	17	1	US-09-866-108A-8412	Sequence 8412, Ap
1477	12.2	0.7	17	1	US-09-371-772B-931	Sequence 931, App	c1549	12.2	0.7	17	1	US-09-866-108A-8412	Sequence 8412, Ap
1478	12.2	0.7	17	1	US-09-371-772B-1266	Sequence 1266, Ap	c1550	12.2	0.7	17	1	US-09-866-108A-8498	Sequence 8498, Ap
1479	12.2	0.7	17	1	US-09-371-772B-1587	Sequence 1587, Ap	1551	12.2	0.7	17	1	US-09-866-108A-8724	Sequence 8724, Ap
1480	12.2	0.7	17	1	US-09-371-772B-1657	Sequence 1657, Ap	c1552	12.2	0.7	17	1	US-09-866-108A-8900	Sequence 8900, Ap
1481	12.2	0.7	17	1	US-09-371-772B-2000	Sequence 2000, Ap	1553	12.2	0.7	17	1	US-09-866-108A-9075	Sequence 9075, Ap
1482	12.2	0.7	17	1	US-09-371-772B-2129	Sequence 2129, Ap	1554	12.2	0.7	17	1	US-09-866-108A-9076	Sequence 9076, Ap
1483	12.2	0.7	17	1	US-09-371-772B-2661	Sequence 2661, Ap	1555	12.2	0.7	17	1	US-09-866-108A-9233	Sequence 9233, Ap
1484	12.2	0.7	17	1	US-09-371-772B-3299	Sequence 3299, Ap	c1556	12.2	0.7	17	1	US-09-866-108A-10029	Sequence 10029, A
1485	12.2	0.7	17	1	US-09-371-772B-3807	Sequence 3807, Ap	c1557	12.2	0.7	17	1	US-09-866-108A-10096	Sequence 10096, A
1486	12.2	0.7	17	1	US-09-371-772B-4169	Sequence 4169, Ap	1558	12.2	0.7	17	1	US-09-866-108A-10395	Sequence 10395, A
1487	12.2	0.7	17	1	US-09-371-772B-4719	Sequence 4719, Ap	1559	12.2	0.7	17	1	US-09-866-108A-10401	Sequence 10401, A
1488	12.2	0.7	17	1	US-09-371-772B-4793	Sequence 4793, Ap	1560	12.2	0.7	17	1	US-09-866-108A-10402	Sequence 10402, A
1489	12.2	0.7	17	1	US-09-371-772B-4923	Sequence 4923, Ap	1561	12.2	0.7	17	1	US-09-866-108A-10607	Sequence 10607, A
1490	12.2	0.7	17	1	US-09-371-772B-5317	Sequence 5317, Ap	1562	12.2	0.7	17	1	US-09-866-108A-10641	Sequence 10641, A
1491	12.2	0.7	17	1	US-09-371-772B-6264	Sequence 6264, Ap	c1563	12.2	0.7	17	1	US-09-866-108A-10666	Sequence 10666, A
1492	12.2	0.7	17	1	US-09-371-772B-6265	Sequence 6265, Ap	c1564	12.2	0.7	17	1	US-09-866-108A-10667	Sequence 10667, A
1493	12.2	0.7	17	1	US-09-371-772B-6428	Sequence 6428, Ap	c1565	12.2	0.7	17	1	US-09-404-912-277	Sequence 277, App
						Sequence 6475, Ap	1566	12.2	0.7	17	1	US-09-404-912-555	Sequence 555, App

c1567	12.2	0.7	18	1	US-07-903-466-9	Sequence 9, Appli	1640	12.2	0.7	18	1	US-09-344-300-17	Sequence 17, Appli
1568	12.2	0.7	18	1	US-08-388-381-36	Sequence 36, Appl	c1641	12.2	0.7	18	1	US-09-209-525-4	Sequence 4, Appli
c1569	12.2	0.7	18	1	US-08-200-011-1	Sequence 1, Appli	c1642	12.2	0.7	18	1	US-08-957-351-21	Sequence 21, Appl
c1570	12.2	0.7	18	1	US-08-319-492B-735	Sequence 735, App	1643	12.2	0.7	18	1	US-09-522-217-104	Sequence 104, App
1571	12.2	0.7	18	1	US-08-183-211-3	Sequence 739, App	c1644	12.2	0.7	18	1	US-09-496-694B-53	Sequence 53, Appl
1572	12.2	0.7	18	1	US-08-183-211-3	Sequence 3, Appli	c1645	12.2	0.7	18	1	US-09-496-694B-53	Sequence 93, Appl
c1573	12.2	0.7	18	1	US-08-183-211-6	Sequence 6, Appli	c1646	12.2	0.7	18	1	US-08-584-040-8368	Sequence 8368, Ap
c1574	12.2	0.7	18	1	US-08-384-490-10	Sequence 10, Appl	c1647	12.2	0.7	18	1	US-09-303-069-21	Sequence 21, Appl
1575	12.2	0.7	18	1	US-08-729-202-3	Sequence 3, Appli	c1648	12.2	0.7	18	1	US-09-303-069-22	Sequence 22, Appl
c1576	12.2	0.7	18	1	US-08-459-383-10	Sequence 10, Appl	1649	12.2	0.7	18	1	US-08-679-645-633	Sequence 633, App
1577	12.2	0.7	18	1	US-08-896-371-3	Sequence 3, Appli	1650	12.2	0.7	18	1	US-08-679-645-633	Sequence 1165, Ap
c1578	12.2	0.7	18	1	US-08-761-131-3	Sequence 23, Appl	1651	12.2	0.7	18	1	US-09-205-995-42	Sequence 42, Appl
1579	12.2	0.7	18	1	US-08-410-540-23	Sequence 23, Appl	1652	12.2	0.7	18	1	US-09-423-744A-10	Sequence 10, Appl
c1580	12.2	0.7	18	1	US-08-800-751-26	Sequence 26, Appl	1653	12.2	0.7	18	1	US-09-167-109-117	Sequence 117, App
c1581	12.2	0.7	18	1	US-08-311-486C-1132	Sequence 1132, Ap	c1654	12.2	0.7	18	1	US-08-882-322-2	Sequence 2, Appli
1582	12.2	0.7	18	1	US-08-578-709-4	Sequence 4, Appli	1655	12.2	0.7	18	1	US-09-387-341-183	Sequence 183, App
1583	12.2	0.7	18	1	US-08-485-721-20	Sequence 20, Appl	c1656	12.2	0.7	18	1	US-09-619-103-13	Sequence 13, Appl
c1584	12.2	0.7	18	1	US-08-110-294A-47	Sequence 47, Appl	c1657	12.2	0.7	18	1	US-09-702-543-7	Sequence 7, Appli
1585	12.2	0.7	18	1	US-08-392-935-20	Sequence 20, Appl	1658	12.2	0.7	18	1	US-09-920-760-39	Sequence 39, Appl
1586	12.2	0.7	18	1	US-08-117-953-178	Sequence 178, App	c1659	12.2	0.7	18	1	US-09-920-760-42	Sequence 42, Appl
c1587	12.2	0.7	18	1	US-08-461-990B-30	Sequence 30, Appl	c1660	12.2	0.7	18	1	US-09-920-760-50	Sequence 50, Appl
c1588	12.2	0.7	18	1	US-08-627-254C-16	Sequence 16, Appl	1661	12.2	0.7	18	1	US-09-920-760-63	Sequence 63, Appl
c1589	12.2	0.7	18	1	US-08-404-531B-13	Sequence 13, Appl	c1662	12.2	0.7	18	1	US-09-077-619-13	Sequence 13, Appl
c1590	12.2	0.7	18	1	US-08-389-926-47	Sequence 47, Appl	c1663	12.2	0.7	18	1	US-09-077-619-29	Sequence 29, Appl
c1591	12.2	0.7	18	1	US-08-468-551-5	Sequence 5, Appli	1664	12.2	0.7	18	1	US-09-342-325C-26	Sequence 26, Appl
c1592	12.2	0.7	18	1	US-08-585-684B-2686	Sequence 7, Appli	1665	12.2	0.7	18	1	US-09-500-253B-20	Sequence 20, Appl
c1593	12.2	0.7	18	1	US-08-390-818-26	Sequence 26, Appl	1666	12.2	0.7	18	1	US-09-422-978-6083	Sequence 6083, Ap
c1594	12.2	0.7	18	1	US-09-197-378-24	Sequence 24, Appl	c1667	12.2	0.7	18	1	US-09-422-978-6531	Sequence 6531, Ap
1595	12.2	0.7	18	1	US-09-161-015-40	Sequence 40, Appl	1668	12.2	0.7	18	1	US-09-422-978-6597	Sequence 6597, Ap
1596	12.2	0.7	18	1	US-09-205-860-35	Sequence 35, Appl	c1669	12.2	0.7	18	1	US-09-422-978-7233	Sequence 7233, Ap
c1597	12.2	0.7	18	1	US-09-213-768-22	Sequence 22, Appl	c1670	12.2	0.7	18	1	US-09-422-978-8462	Sequence 8462, Ap
1598	12.2	0.7	18	1	US-08-696-497B-3	Sequence 3, Appli	1671	12.2	0.7	18	1	US-09-422-978-8588	Sequence 8588, Ap
c1600	12.2	0.7	18	1	US-09-106-038A-76	Sequence 76, Appl	1672	12.2	0.7	18	1	US-09-422-978-9354	Sequence 9354, Ap
c1601	12.2	0.7	18	1	US-09-205-921-32	Sequence 32, Appl	1673	12.2	0.7	18	1	US-09-422-978-9642	Sequence 9642, Ap
c1602	12.2	0.7	18	1	US-09-255-893-47	Sequence 47, Appl	1674	12.2	0.7	18	1	US-09-422-978-9692	Sequence 9692, Ap
1603	12.2	0.7	18	1	US-09-255-911-44	Sequence 44, Appl	c1675	12.2	0.7	18	1	US-09-422-978-11144	Sequence 11144, A
1604	12.2	0.7	18	1	US-09-289-376-42	Sequence 42, Appl	c1676	12.2	0.7	18	1	US-09-254-776B-23	Sequence 23, Appl
c1605	12.2	0.7	18	1	US-09-357-072-17	Sequence 17, Appl	1677	12.2	0.7	18	1	US-09-371-772B-4024	Sequence 4024, Ap
1606	12.2	0.7	18	1	US-09-357-072-36	Sequence 36, Appl	c1678	12.2	0.7	18	1	US-09-923-245-104	Sequence 104, App
c1607	12.2	0.7	18	1	US-09-161-443-33	Sequence 33, Appl	c1679	12.2	0.7	18	1	US-09-526-193A-35	Sequence 35, Appl
c1608	12.2	0.7	18	1	US-09-339-964-17	Sequence 17, Appl	c1680	12.2	0.7	18	1	US-09-907-794A-229	Sequence 229, App
1609	12.2	0.7	18	1	US-08-665-259-40	Sequence 40, Appl	c1681	12.2	0.7	18	1	US-09-807-784B-12	Sequence 12, Appl
1610	12.2	0.7	18	1	US-08-762-500-40	Sequence 40, Appl	c1682	12.2	0.7	18	1	US-09-905-125A-229	Sequence 229, App
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## RESULT 1

US-09-696-791-464

; Sequence 464, Application US/09696791

; Patent No. 6770633

; GENERAL INFORMATION:

; APPLICANT: Robbins, Joan M.

; APPLICANT: Tritz, Richard

; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE

; TITLE OF INVENTION: SKIN AND EYE DISEASES

## ALIGNMENTS

FILE REFERENCE: 480124.407  
CURRENT APPLICATION NUMBER: US/09/696,791  
CURRENT FILING DATE: 2000-10-25  
NUMBER OF SEQ ID NOS: 4523  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 464  
LENGTH: 19  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
OTHER INFORMATION: Cdk4 ribozyme binding site  
US-09-696-791-464

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Sequence 465, Application US/09696791  
Patent No. 6770633  
GENERAL INFORMATION:  
APPLICANT: Robbins, Joan M.  
TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE  
DISEASES  
FILE REFERENCE: 480124.407  
CURRENT APPLICATION NUMBER: US/09/696,791  
CURRENT FILING DATE: 2000-10-25  
NUMBER OF SEQ ID NOS: 4523  
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SEQ ID NO 465  
LENGTH: 19  
TYPE: DNA  
ORGANISM: Homo sapiens  
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US-09-696-791-465

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Patent No. 6686188  
GENERAL INFORMATION:  
APPLICANT: GU, Yizhong  
APPLICANT: JI, Yonggang  
APPLICANT: PENN, Sharron G.  
APPLICANT: HANZEL, David K.  
APPLICANT: RANK, David R.  
APPLICANT: CHEN, Wensheng  
APPLICANT: SHANNON, Mark  
TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE  
FILE REFERENCE: AEOMICA-7  
CURRENT APPLICATION NUMBER: US/09/866,108A  
CURRENT FILING DATE: 2001-05-25  
PRIOR APPLICATION NUMBER: US 60/207,456  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: GB 24263.6  
PRIOR FILING DATE: 2000-10-04

PRIOR APPLICATION NUMBER: US 60/236,359  
PRIOR FILING DATE: 2000-09-27  
PRIOR APPLICATION NUMBER: PCT/US01/00666  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00667  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00664  
PRIOR FILING DATE: 2001-01-30  
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PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00665  
PRIOR FILING DATE: 2001-01-30  
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PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00663  
PRIOR FILING DATE: 2001-01-30  
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Patent No. 5858662  
GENERAL INFORMATION:  
APPLICANT: Keating, Mark T.  
APPLICANT: Morris, Colleen A.  
TITLE OF INVENTION: Diagnosis of Williams Syndrome and  
Williams Syndrome Cognitive Profile by Analysis of the  
TITLE OF INVENTION: Presence or Absence of a LIM-Kinase Gene  
NUMBER OF SEQUENCES: 42  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Rothwell, Figg, Ernst & Kurz, P.C.  
STREET: 555 Thirteenth Street, N.W., Suite 701 East  
CITY: Tower  
STATE: Washington  
COUNTRY: U.S.A.  
ZIP: 20004  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/678,039A  
FILING DATE: 10-JUL-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Saxe, Stephen A.  
REGISTRATION NUMBER: 38,609  
REFERENCE/DOCKET NUMBER: 2323-120A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-624-1589  
TELEFAX: 202-783-6031  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 base pairs



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; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "Primer sequence"
US-08-678-039A-3
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Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 67;
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Qy 1033 GACTTTGGCTGGCCGAGCAAG 1056
      ||||| ||||| ||||| |||||
Db 1 GACTTTGGCTGGCTCGAGACATG 24
```

## RESULT 5

```
US-09-866-108A-15294
; Sequence 15294, Application US/09866108A
; Patent No. 6686188
```

```
; GENERAL INFORMATION:
; APPLICANT: GU, Yizhong
```

```
; APPLICANT: JI, Yonggang
```

```
; APPLICANT: PENN, Sharron G.
```

```
; APPLICANT: HANZEL, David K.
```

```
; APPLICANT: RANK, David R.
```

```
; APPLICANT: CHEN, Wensheng
```

```
; APPLICANT: SHANNON, Mark
```

```
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
```

```
; CURRENT APPLICATION NUMBER: US/09/866,108A
```

```
; CURRENT FILING DATE: 2001-05-25
```

```
; PRIOR APPLICATION NUMBER: US 60/207,456
```

```
; PRIOR FILING DATE: 2000-05-26
```

```
; PRIOR FILING DATE: 2000-10-04
```

```
; PRIOR APPLICATION NUMBER: GB 24263.6
```

```
; PRIOR FILING DATE: 2000-09-27
```

```
; PRIOR FILING DATE: 2000-09-27
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00666
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00667
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00664
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00669
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00665
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00668
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00663
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; Remaining Prior Application data removed - See File Wrapper or PALM.
```

```
; NUMBER OF SEQ ID NOS: 15755
```

```
; SOFTWARE: Aecomica Sequence Listing Engine
```

```
; Patent No. 6686188
```

```
; SEQ ID NO 15294
```

```
; LENGTH: 25
```

```
; TYPE: DNA
```

```
; ORGANISM: Homo sapiens
```

```
US-09-866-108A-15294
```

```
Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

```
Qy 555 CCTACGCGCGCTCCGTCGTCGT 578
      ||||| ||||| ||||| |||||
Db 2 CCTACGCTCCGCTCCATCGTGT 25
```

## RESULT 6

```
US-09-866-108A-15296
```

```
; Sequence 15296, Application US/09866108A
; Patent No. 6686188
```

```
; GENERAL INFORMATION:
```

```
; APPLICANT: GU, Yizhong
```

```
; APPLICANT: JI, Yonggang
```

```
; APPLICANT: PENN, Sharron G.
```

```
; APPLICANT: HANZEL, David K.
```

```
; APPLICANT: RANK, David R.
```

```
; APPLICANT: CHEN, Wensheng
```

```
; APPLICANT: SHANNON, Mark
```

```
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
```

```
; CURRENT APPLICATION NUMBER: US/09/866,108A
```

```
; CURRENT FILING DATE: 2001-05-25
```

```
; PRIOR APPLICATION NUMBER: US 60/207,456
```

```
; PRIOR FILING DATE: 2000-05-26
```

```
; PRIOR FILING DATE: 2000-10-04
```

```
; PRIOR APPLICATION NUMBER: GB 24263.6
```

```
; PRIOR FILING DATE: 2000-09-27
```

```
; PRIOR FILING DATE: 2000-09-27
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00666
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00667
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00664
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00669
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00665
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00668
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; PRIOR APPLICATION NUMBER: PCT/US01/00663
```

```
; PRIOR FILING DATE: 2001-01-30
```

```
; Remaining Prior Application data removed - See File Wrapper or PALM.
```

```
; NUMBER OF SEQ ID NOS: 15755
```

```
; SOFTWARE: Aecomica Sequence Listing Engine
```

```
; Patent No. 6686188
```

```
; SEQ ID NO 15296
```

```
; LENGTH: 25
```

```
; TYPE: DNA
```

```
; ORGANISM: Homo sapiens
```

```
US-09-866-108A-15296
```

```
Query Match 1.0%; Score 17.6; DB 1; Length 25;
```

```
Best Local Similarity 83.3%; Pred. No. 67;
```

```
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

```
Qy 556 CTCAGCGCGCTCCGTCGTCGT 579
```

```
      ||||| ||||| ||||| |||||
```

```
Db 1 CTCATCCTCCGCTCCATCGTGC 24
```

## RESULT 7

```
US-08-859-998-960/c
```

```
; Sequence 960, Application US/08859998
```

```
; Patent No. 5994076
```

```
; GENERAL INFORMATION:
```

```
; APPLICANT: Chenchik, Alex
```

```
; APPLICANT: Jokhadze, George
```

```
; APPLICANT: Bibilashvili, Robert
```

```
; TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
```

```
; TITLE OF INVENTION: EXPRESSION
```

```
; NUMBER OF SEQUENCES: 1375
```

```
; CORRESPONDENCE ADDRESS:
```

```
; ADDRESS: Fish & Richardson, P.C.
```

```
; STREET: 2200 Sand Hill Road, Suite 100
```

```
; CITY: Menlo Park
```

```
; STATE: CA
```

```
; COUNTRY: US
```

```
; ZIP: 94025
```

```
; COMPUTER READABLE FORM:
```

```
; MEDIUM TYPE: Diskette
```

```

RESULT 8
US-09-225-928-960/c
; Sequence 960, Application US/09225928
; Patent No. 6352829
; GENERAL INFORMATION:
; APPLICANT: Chenchik, Alex
; ; Jekhade, George
; ; Bibilashvili, Robert
; TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
; ; EXPRESSION
; NUMBER OF SEQUENCES: 1375
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: CA
; COUNTRY: US
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/225,928
; Filing Date: 05-Jan-1999
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/859,998
; FILING DATE: 21-MAY-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Field, Bret E.
; REGISTRATION NUMBER: 37,620
; REFERENCE/DOCKET NUMBER: 09096/002001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-322-5070

```

```

;
; TELEFAX: 415-854-0875
;
; INFORMATION FOR SEQ ID NO: 960:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 26 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   MOLECULE TYPE: DNA
;   FEATURE:
;     OTHER INFORMATION: oligonucleotide primer
;
;   SEQUENCE DESCRIPTION: SEQ ID NO: 960:
US-09-225-928-960

Query Match      1.0%; Score 17.6; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 4; Indels

Qy      826 TCCCTACCCCTGTCTTTGAGTAC 849
Db      25 TCTGCACCCCTGTCTTTGAGTGC 2

RESULT 9
US-09-225-201B-960/c
; Sequence 960, Application US/09225201B
; Patent No. 6489455
; GENERAL INFORMATION:
;   APPLICANT: Chenchik, Alex
;             Johhadze, George
;             Biblasiavilli, Robert
; TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                   EXPRESSION
; NUMBER OF SEQUENCES: 1375
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Fish & Richardson, P.C.
;   STREET: 2200 Sand Hill Road, Suite 100
;   CITY: Menlo Park
;   STATE: CA
;   COUNTRY: US
;   ZIP: 94025
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Diskette
;   COMPUTER: IBM Compatible
;   OPERATING SYSTEM: Windows95
;   SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/225,201B
;   FILING DATE: 05-Jan-1999
;   CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US/08/859,998
;   FILING DATE: 21-MAY-1997
; ATTORNEY/AGENT INFORMATION:
;   NAME: Field, Bret E.
;   REGISTRATION NUMBER: 37,620
;   REFERENCE/DOCKET NUMBER: 09096/002001
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 415-322-5070
;   TELEFAX: 415-854-0875
; INFORMATION FOR SEQ ID NO: 960:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 26 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   MOLECULE TYPE: DNA
;   FEATURE:
;     OTHER INFORMATION: oligonucleotide primer
;
;   SEQUENCE DESCRIPTION: SEQ ID NO: 960:
US-09-225-201B-960

Query Match      1.0%; Score 17.6; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 72;

```

```
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 826 TCCCTCACCCTGCTTTGAGTAC 849
Db 25 TCTGTACCCCTGCTTTGAGTGC 2
RESULT 10
US-09-696-791-343
; Sequence 343, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 343
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk3 ribozyme binding site
US-09-696-791-343
Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 45;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAATGAG 19
RESULT 11
US-09-696-791-347
; Sequence 347, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 347
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk3 ribozyme binding site
US-09-696-791-347
Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 45;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1028 TGGCTGACTTTGGCTGGC 1046
Db 1 TGGCTGACTTCGGCTGGC 19
RESULT 12
US-08-910-629A-31/c
; Sequence 31, Application US/08910629A
; Patent No. 5877309
```

```
; GENERAL INFORMATION:
; APPLICANT: Robert A. McKay
; APPLICANT: Nicholas M. Dean
; APPLICANT: Brett Monia
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE MODULATION OF JNK
; TITLE OF INVENTION: PROTEINS
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Law Offices of Jane Massey Licata
; STREET: 66 East Main Street
; CITY: Marlton
; STATE: NJ
; COUNTRY: USA
; ZIP: 08053
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
; MEDIUM TYPE: STORAGE
; COMPUTER: PENTIUM
; OPERATING SYSTEM: WINDOWS 95
; SOFTWARE: WORDPERFECT 6.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/910,629A
; FILING DATE: August 13, 1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISPH-0215
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (609) 779-2400
; TELEFAX: (609) 779-8488
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: Yes
; US-08-910-629A-31
Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1033 GACTTTGGCCTGGCCCG 1049
Db 20 GACTTTGGCCTGGCCCG 4
RESULT 13
US-08-910-629A-42
; Sequence 42, Application US/08910629A
; Patent No. 5877309
; GENERAL INFORMATION:
; APPLICANT: Robert A. McKay
; APPLICANT: Nicholas M. Dean
; APPLICANT: Brett Monia
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE MODULATION OF JNK
; TITLE OF INVENTION: PROTEINS
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Law Offices of Jane Massey Licata
; STREET: 66 East Main Street
; CITY: Marlton
; STATE: NJ
; COUNTRY: USA
; ZIP: 08053
; COMPUTER READABLE FORM:
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MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB  
MEDIUM TYPE: STORAGE  
COMPUTER: PENTIUM  
OPERATING SYSTEM: WINDOWS 95  
SOFTWARE: WORDPERFECT 6.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/910,629A  
FILING DATE: August 13, 1997  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Jane Massey Licata  
REGISTRATION NUMBER: 32,257  
REFERENCE/DOCKET NUMBER: ISPH-0215  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (609) 779-2400  
TELEFAX: (609) 779-8488  
INFORMATION FOR SEQ ID NO: 42:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20  
TYPE: Nucleic Acid  
STRANDEDNESS: Single  
TOPOLOGY: Linear  
ANTI-SENSE: No  
US-08-910-629A-42

Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 63;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049  
DB 1 GACTTTGGCCTGGCCCG 17

RESULT 14  
US-09-209-668-7/c  
Sequence 7, Application US/09209668A  
Patent No. 6114517  
GENERAL INFORMATION:  
APPLICANT: Monia, Brett P.  
APPLICANT: Xu, Xiaoxing S.  
TITLE OF INVENTION: METHODS OF MODULATING TUMOR NECROSIS FACTOR  
TITLE OF INVENTION: alpha-INDUCED EXPRESSION OF CELL ADHESION MOLECULES  
FILE REFERENCE: ISPH-0336  
CURRENT APPLICATION NUMBER: US/09/209,668A  
CURRENT FILING DATE: 1998-12-10  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 7  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: antisense sequence  
US-09-209-668-7

Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 63;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049  
DB 20 GACTTTGGCCTGGCCCG 4

RESULT 15  
US-09-287-796-31/c  
Sequence 31, Application US/09287796A  
Patent No. 6133246  
GENERAL INFORMATION:

APPLICANT: McKay, Robert A.  
APPLICANT: Dean, Nicholas M.  
APPLICANT: Monia, Brett  
APPLICANT: Nero, Pam  
APPLICANT: Gaarde, William A.  
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS  
TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS  
FILE REFERENCE: ISPH-0350  
CURRENT APPLICATION NUMBER: US/09/287,796A  
CURRENT FILING DATE: 1999-04-07  
EARLIER APPLICATION NUMBER: 09/130,616  
EARLIER FILING DATE: 1998-08-07  
EARLIER APPLICATION NUMBER: 08/910,629  
EARLIER FILING DATE: 1997-08-03  
NUMBER OF SEQ ID NOS: 165  
SEQ ID NO 31  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-287-796-31

Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 63;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049  
DB 20 GACTTTGGCCTGGCCCG 4

RESULT 16  
US-09-287-796-42  
Sequence 42, Application US/09287796A  
Patent No. 6133246  
GENERAL INFORMATION:  
APPLICANT: McKay, Robert A.  
APPLICANT: Dean, Nicholas M.  
APPLICANT: Monia, Brett  
APPLICANT: Nero, Pam  
APPLICANT: Gaarde, William A.  
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS  
TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS  
FILE REFERENCE: ISPH-0350  
CURRENT APPLICATION NUMBER: US/09/287,796A  
CURRENT FILING DATE: 1999-04-07  
EARLIER APPLICATION NUMBER: 09/130,616  
EARLIER FILING DATE: 1998-08-07  
EARLIER APPLICATION NUMBER: 08/910,629  
EARLIER FILING DATE: 1997-08-03  
NUMBER OF SEQ ID NOS: 165  
SEQ ID NO 42  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-287-796-42

Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 63;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049  
DB 1 GACTTTGGCCTGGCCCG 17

RESULT 17  
US-09-130-616-31/c  
Sequence 31, Application US/09130616C  
Patent No. 6221850

Tue Nov 2 13:39:13 2004

```

; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 73
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-300-958A-73

```

```

Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 96;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

```

QY 531 CAATAGCCCCATCTTTGACAAAGCCC 555
Db 25 CACTAGCAGCATCTTTGAAAAAGCAC 1

```

RESULT 20

```

US-08-538-666-11/c
; Sequence 11, Application US/08538666
; Patent No. 6103465
; GENERAL INFORMATION:
; APPLICANT: Leslie Johnston-Dow, Robert B. Chadwick, Peter Parham
; TITLE OF INVENTION: Method and reagents for typing HLA class I genes
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Paul D. Grossman, Perkin-Elmer Corp., Applied Biosystems Division
; STREET: 850 Lincoln Centre Drive
; CITY: Foster City
; STATE: California
; COUNTRY: USA
; ZIP: 94404
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch diskette
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 3.10/DOS 6.20
; SOFTWARE: Microsoft Word for Windows, vers. 6.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/538,666
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul D. Grossman
; REGISTRATION NUMBER: 36,537
; REFERENCE/DOCKET NUMBER: 4259C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 638-5846
; TELEFAX: (415) 638-6071
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 nucleotides
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-538-666-11

```

```

; GENERAL INFORMATION:
; APPLICANT: McKay, Robert A.
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Monia, Brett
; APPLICANT: Nero, Pam
; APPLICANT: Gaarde, William A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
; FILE REFERENCE: ISPH-0318
; CURRENT APPLICATION NUMBER: US/09/130,616C
; PRIOR FILING DATE: 1998-08-07
; PRIOR APPLICATION NUMBER: 08/910,629
; EARLIER FILING DATE: 1997-08-03
; NUMBER OF SEQ ID NOS: 178
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-130-616-31

```

```

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1033 GACTTTGGCCTGGCCCG 1049
Db 20 GACTTTGGCCTGGCCCG 4

```

RESULT 18

```

US-09-130-616-42
; Sequence 42, Application US/09130616C
; Patent No. 6221850
; GENERAL INFORMATION:
; APPLICANT: McKay, Robert A.
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Monia, Brett
; APPLICANT: Nero, Pam
; APPLICANT: Gaarde, William A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
; FILE REFERENCE: ISPH-0318
; CURRENT APPLICATION NUMBER: US/09/130,616C
; PRIOR FILING DATE: 1998-08-07
; PRIOR APPLICATION NUMBER: 08/910,629
; EARLIER FILING DATE: 1997-08-03
; NUMBER OF SEQ ID NOS: 178
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-130-616-42

```

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Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1033 GACTTTGGCCTGGCCCG 1049
Db 1 GACTTTGGCCTGGCCCG 17

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RESULT 19

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US-09-300-958A-73/c
; Sequence 73, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John

```

```
Query Match
Best Local Similarity 1.0%; Score 16.8; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 352 GGGTCTGATGGGAGAGTGA 371
Db 21 GGGTCTGATGGGAGAGTCA 2

RESULT 21
US-08-538-666-17/c
; Sequence 17, Application US/08538666
; Patent No. 6103465
; GENERAL INFORMATION:
; APPLICANT: Leslie Johnston-Dow, Robert B. Chadwick, Peter Partham
; TITLE OF INVENTION: Method and reagents for typing HLA class I genes
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Paul D. Grossman, Perkin-Elmer Corp., Applied Biosystems Division
; STREET: 850 Lincoln Centre Drive
; CITY: Foster City
; STATE: California
; COUNTRY: USA
; ZIP: 94404
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch diskette
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 3.10/DOS 6.20
; SOFTWARE: Microsoft Word for Windows, vers. 6.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/538,666
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul D. Grossman
; REGISTRATION NUMBER: 36,537
; REFERENCE/DOCKET NUMBER: 4259C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 638-5846
; TELEFAX: (415) 638-6071
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 nucleotides
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-538-666-17

Query Match
Best Local Similarity 1.0%; Score 16.8; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 352 GGGTCTGATGGGAGAGTGA 371
Db 21 GGGTCTGATGGGAGAGTCA 2

RESULT 22
US-09-657-472-2176
; Sequence 2176, Application US/09657472
; Patent No. 6727063
; GENERAL INFORMATION:
; APPLICANT: Lander, Eric S.
; APPLICANT: Cargill, Michele
; APPLICANT: Ireland, James S.
; APPLICANT: Bolik, Stacey
; APPLICANT: Daley, George Q.
; APPLICANT: McCarthy, Jeanette J.
; TITLE OF INVENTION: SINGLE NUCLEOTIDE POLYMORPHISMS IN GENES
; FILE REFERENCE: 2825.1027-001
```

```
; CURRENT APPLICATION NUMBER: US/09/657,472
; CURRENT FILING DATE: 2000-09-07
; PRIOR APPLICATION NUMBER: US 60/153,357
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/220,947
; PRIOR FILING DATE: 2000-07-26
; PRIOR APPLICATION NUMBER: US 60/225,724
; PRIOR FILING DATE: 2000-08-16
; NUMBER OF SEQ ID NOS: 2551
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2176
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-657-472-2176

Query Match
Best Local Similarity 1.0%; Score 16.6; DB 1; Length 21;
Matches 16; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 715 CTGGAACATGAGAGGG 731
Db 4 CTGGAACRTGAGAGGG 20

RESULT 23
US-08-785-247-21
; Sequence 21, Application US/08785247
; Patent No. 6040149
; GENERAL INFORMATION:
; APPLICANT: Kolesnick, Richard N.
; APPLICANT: Liu, Jun
; APPLICANT: Zhang, Yuhua
; TITLE OF INVENTION: ASSAY FOR IDENTIFYING AGENTS WHICH ACT ON THE
; TITLE OF INVENTION: CERAMIDE-ACTIVATED PROTEIN KINASE, KINASE
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/785,247
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 48582-A/JPW/CCA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-278-0400
; TELEFAX: 212-381-0526
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-785-247-21

Query Match
Best Local Similarity 1.0%; Score 16.6; DB 1; Length 24;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

Tue Nov 2 13:39:13 2004

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; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; TITLE OF INVENTION: NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN E
; FILE REFERENCE: MDHMOF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 1392
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-1392

Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1005 CAACGAGGGGAGAGCTCAAGC 1027
DB 2 CAGCAAGAGGAGAGAGGTCAAGC 24

RESULT 27
US-09-827-998-1393
; Sequence 1393, Application US/09827998
; Patent No. 6656700
; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; TITLE OF INVENTION: NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN E
; FILE REFERENCE: MDHMOF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; CURRENT FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 1393
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-1393

Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1005 CAACGAGGGGAGAGCTCAAGC 1027
DB 1 CAGCAAGAGGAGAGAGGTCAAGC 23

RESULT 28
US-09-866-108A-15293
; Sequence 15293, Application US/09866108A
; Patent No. 6686188
; GENERAL INFORMATION:
; APPLICANT: GU, Yizhong
; APPLICANT: JI, Yonggang
; APPLICANT: PENN, Sharron G.
; APPLICANT: HANZEL, David K.
; APPLICANT: RANK, David R.
; APPLICANT: CHEN, Wensheng

; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; TITLE OF INVENTION: NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN E
; FILE REFERENCE: MDHMOF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; CURRENT FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 1391
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-1391

Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1005 CAACGAGGGGAGAGCTCAAGC 1027
DB 3 CAGCAAGAGGAGAGAGGTCAAGC 25

RESULT 26
US-09-827-998-1392
; Sequence 1392, Application US/09827998
; Patent No. 6656700

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; APPLICANT: SHANNON, Mark
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
; FILE REFERENCE: AEOMICA-7
; CURRENT APPLICATION NUMBER: US/09/866,108A
; CURRENT FILING DATE: 2001-05-25
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 15755
; SOFTWARE: Aeomica Sequence Listing Engine
; Patent No. 6686188
; SEQ ID NO 15293
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-866-108A-15293

Query Match          1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred.No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 555 CCTCAGCCGCGCCCTCCGTCGTG 577
Db 3 CCTCATCTCCGGCTCCATCGTG 25

RESULT 29
US-09-866-108A-15297
; Sequence 15297, Application US/09866108A
; Patent No. 6686188
; GENERAL INFORMATION:
; APPLICANT: GU, Yizhong
; APPLICANT: JI, Yonggang
; APPLICANT: PENN, Sharron G.
; APPLICANT: HANZEL, David K.
; APPLICANT: RANK, David R.
; APPLICANT: CHEN, Wensheng
; APPLICANT: SHANNON, Mark
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
; FILE REFERENCE: AEOMICA-7
; CURRENT APPLICATION NUMBER: US/09/866,108A
; CURRENT FILING DATE: 2001-05-25
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
```

```
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 15755
; SOFTWARE: Aeomica Sequence Listing Engine
; Patent No. 6686188
; SEQ ID NO 15297
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-866-108A-15297

Query Match          1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred.No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 557 TCAGCCGCGCCCTCCGTCGTGTC 579
Db 1 TCATCTCCGGCTCCATCGTGTC 23

RESULT 30
US-08-951-923-51/c
; Sequence 51, Application US/08951923
; Patent No. 6048693
; GENERAL INFORMATION:
; APPLICANT: Bitter, Grant
; TITLE OF INVENTION: PHENOTYPIC ASSAYS OF CYCLIN/CYCLIN-DEPENDENT KINASE
; TITLE OF INVENTION: FUNCTION
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooley Godward LLP
; STREET: 5 Palo Alto Square, 3000 El Camino Real
; CITY: Palo Alto
; STATE: CA
; COUNTRY: US
; ZIP: 94306-2155
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/951,923
; FILING DATE: October 16, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Neeley, Richard L.
; REGISTRATION NUMBER: 30,092
; REFERENCE/DOCKET NUMBER: BITT-001/02US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650 843-5000
; TELEFAX: 650 857-0663
; TELEX: 380816COOLEYPA
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18
; TYPE: nucleic acid
; STRANDEDNESS: single stranded
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; HYPOTHEICAL: NO
; ANTI-SENSE: NO
; US-08-951-923-51

Query Match          0.9%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred.No. 74;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```



Qy 1033 GACTTGGCTGGCCGA 1050  
Db 18 GACTTGGCTGGCCAGA 1

LENGTH: 21 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: Other nucleic acid  
US-08-863-639A-48

Query Match 0.9%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGCGGCAGTG 250  
Db 21 GTGGTGGTGGTGGTGGTG 1

US-08-863-639A-76  
US-08-863-639A-76  
Sequence 76, Application US/08863639A  
Patent No. 5981185  
GENERAL INFORMATION:  
APPLICANT: Matson, Robert S.  
APPLICANT: Coassin, Peter J.  
APPLICANT: Rampal, Jang B.  
APPLICANT: Caskey, C. T.  
TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS  
NUMBER OF SEQUENCES: 95  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sheldon & Mak  
STREET: 225 South Lake Avenue, 9th Floor  
CITY: Pasadena  
STATE: CA  
COUNTRY: USA  
ZIP: 91101

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage  
COMPUTER: IBM compatible  
OPERATING SYSTEM: Windows 95  
SOFTWARE: Corel WordPerfect 8 version  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/863,639A  
FILING DATE: May 28, 1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Joseph E. Mueth  
REGISTRATION NUMBER: 20,532  
REFERENCE/DOCKET NUMBER: 11859-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (626) 796-4000  
TELEFAX: (626) 795-6321  
INFORMATION FOR SEQ ID NO: 76:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: Other nucleic acid  
US-08-863-639A-76

Query Match 0.9%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGCGGCAGTG 250  
Db 1 GTGGTGGTGGTGGTGGTG 21

US-08-863-639A-76  
US-08-863-639A-76  
Sequence 65, Application US/09726774  
Patent No. 6677153  
GENERAL INFORMATION:

RESULT 34  
US-09-726-774-65  
Sequence 65, Application US/09726774  
Patent No. 6677153  
GENERAL INFORMATION:

APPLICANT: Iversen, Patrick L.  
TITLE OF INVENTION: Antisense Antibacterial Method and  
FILE REFERENCE: 0450-0032.30  
CURRENT APPLICATION NUMBER: US/09/726,774  
CURRENT FILING DATE: 2000-11-29  
PRIOR APPLICATION NUMBER: US 60/166,150  
PRIOR FILING DATE: 1999-11-29  
NUMBER OF SEQ ID NOS: 139  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 65  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: antisense oligomer  
US-09-726-774-65

Query Match 0.9%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1439 ATGCGATGAACATCCATTCT 1459  
DB 1 ATGTCATGCAACATCCACTCT 21

RESULT 35  
US-08-401-512-38/c  
Sequence 38, Application US/08401512  
Patent No. 5599673  
GENERAL INFORMATION:  
APPLICANT: Keating, Mark T.  
APPLICANT: Curran, Mark B.  
APPLICANT: Wang, Qing  
TITLE OF INVENTION: Long QT Syndrome Genes  
NUMBER OF SEQUENCES: 81  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP  
STREET: 1201 New York Avenue, Suite 1000  
CITY: Washington  
STATE: DC  
COUNTRY: USA  
ZIP: 20005-3917  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
FILING DATE: 09-MAR-1995  
APPLICATION NUMBER: US/08/401,512  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Saxe, Stephen A.  
REGISTRATION NUMBER: 38,609  
REFERENCE/DOCKET NUMBER: 19780-113879  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-962-4848  
TELEFAX: 202-962-8100  
INFORMATION FOR SEQ ID NO: 38:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 23 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
US-08-401-512-38

Query Match 0.9%; Score 16.2; DB 1; Length 23;  
Best Local Similarity 85.7%; Pred. No. 1.3e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 698 CACTCAAGGAGATCAGACTGG 718  
DB 22 CACACAGGAGATCAGACAGG 2

RESULT 36  
US-09-544-398B-567  
Sequence 567, Application US/09544398B  
Patent No. 6770461  
GENERAL INFORMATION:  
APPLICANT: Carulli, John P.  
APPLICANT: Little, Randall D.  
APPLICANT: Recker, Robert R.  
APPLICANT: Johnson, Mark L.  
TITLE OF INVENTION: High bone mass gene of 11q13.3  
FILE REFERENCE: 032796-013  
CURRENT APPLICATION NUMBER: US/09/544,398B  
CURRENT FILING DATE: 2002-06-10  
PRIOR APPLICATION NUMBER: US 09/229,319  
PRIOR FILING DATE: 1999-01-13  
PRIOR APPLICATION NUMBER: US 60/071,449  
PRIOR FILING DATE: 1998-01-13  
PRIOR APPLICATION NUMBER: US 60/105,511  
PRIOR FILING DATE: 1998-10-23  
NUMBER OF SEQ ID NOS: 641  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 567  
LENGTH: 24  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-544-398B-567

Query Match 0.9%; Score 16.2; DB 1; Length 24;  
Best Local Similarity 85.7%; Pred. No. 1.4e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 862 CTGAACGAGTACTGATGATGAC 882  
DB 1 CTGAACCACTACTGATGATGAC 21

RESULT 37  
US-08-746-559A-7/c  
Sequence 7, Application US/08746559A  
Patent No. 6084085  
GENERAL INFORMATION:  
APPLICANT: Renato Baserga  
APPLICANT: Mariana Resnicoff  
APPLICANT: Consuelo D'Ambrosio  
APPLICANT: Andre Ferber  
TITLE OF INVENTION: Method of Inducing Resistance to Tumor Growth  
NUMBER OF SEQUENCES: 7  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6084085ris LLP  
STREET: One Liberty Place - 46th Floor  
CITY: Philadelphia  
STATE: PA  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: PC-DOS  
SOFTWARE: WORDPERFECT 6.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/746,559A  
FILING DATE: 13-NOV-1996  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:

```
; APPLICATION NUMBER: 60/006,699
; FILING DATE: 14-NOV-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul K. Legaard
; REGISTRATION NUMBER: 38,534
; REFERENCE/DOCKET NUMBER: TJU-2063
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-746-559A-7

Query Match 0.9%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 GGTACCGGCCCTCGA 1115
Db 16 GGTACCGGCCCTCGA 1

RESULT 38
US-09-696-791-760
; Sequence 760, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 760
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk7 ribozyme binding site
US-09-696-791-760

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGCCTGG 1045
Db 1 CTGGCAGATTTGGCCTGG 19

RESULT 39
US-09-696-791-761
; Sequence 761, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 761
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cyclin D2 ribozyme binding site
US-09-696-791-1893

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAACGAG 1011

; APPLICATION NUMBER: 60/006,699
; FILING DATE: 14-NOV-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul K. Legaard
; REGISTRATION NUMBER: 38,534
; REFERENCE/DOCKET NUMBER: TJU-2063
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-746-559A-7

Query Match 0.9%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 GGTACCGGCCCTCGA 1115
Db 16 GGTACCGGCCCTCGA 1

RESULT 38
US-09-696-791-760
; Sequence 760, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 760
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk7 ribozyme binding site
US-09-696-791-760

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGCCTGG 1045
Db 1 CTGGCAGATTTGGCCTGG 19

RESULT 39
US-09-696-791-761
; Sequence 761, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 761
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cyclin D2 ribozyme binding site
US-09-696-791-1893

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAACGAG 1011
```

Db 1 GAACCTGCTCACCATCGAG 19  
|||||

## RESULT 42

US-09-490-692-35  
; Sequence 35, Application US/09490692  
; Patent No. 6180353  
; GENERAL INFORMATION:  
; APPLICANT: Nicholas M. Dean  
; APPLICANT: Lex M. Cowert  
; TITLE OF INVENTION: ANTISENSE MODULATION OF DAXX EXPRESSION  
; FILE REFERENCE: RFS-0120  
; CURRENT APPLICATION NUMBER: US/09/490,692  
; CURRENT FILING DATE: 2000-01-24  
; NUMBER OF SEQ ID NOS: 176  
; SEQ ID NO 35  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-490-692-35

Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.3e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 229 AGTGGTGGTGGTGGCGCA 247  
|||||

Db 2 ATTGGAGGTGGTGGCGCA 20

## RESULT 43

US-09-322-352A-5  
; Sequence 5, Application US/09322352A  
; Patent No. 6586192  
; GENERAL INFORMATION:  
; APPLICANT: PESCHLE, Cesare  
; APPLICANT: ZIEGLER, Benedikt L  
; TITLE OF INVENTION: Compositions and Methods for Use in Affecting Hematopoietic Stem  
; TITLE OF INVENTION: Populations in Mammals  
; FILE REFERENCE: 9855-2601  
; CURRENT APPLICATION NUMBER: US/09/322,352A  
; CURRENT FILING DATE: 1999-05-28  
; PRIOR APPLICATION NUMBER: US 60/087,153  
; PRIOR FILING DATE: 1998-05-28  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 5  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; OTHER INFORMATION: VEGFR1/Flt4 Primer  
US-09-322-352A-5

Query Match 0.9%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 1.7e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 47 GACCAGCAGTGTGACTGTGAA 68  
|||||

Db 1 GACAAGGAGTGTGACCACGTAA 22

## RESULT 44

5164305-2/c  
; Patent No. 5164305  
; APPLICANT: Wong, Hing C.  
; TITLE OF INVENTION: STREPTOMYCES PROMOTER AND METHOD OF USE  
; THEREOF  
; NUMBER OF SEQUENCES: 4

; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07/466,981  
; FILING DATE: 18-JAN-1990  
; SEQ ID NO:2:  
; LENGTH: 22  
5164305-2

Query Match 0.9%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 1.7e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 546 TGACAGCCCTCAGCCGCGC 567  
|||||

Db 22 TGCCACGCCGTGAGCCGCGC 1

## RESULT 45

US-08-244-269-35/c  
; Sequence 35, Application US/08244269  
; Patent No. 5620847  
; GENERAL INFORMATION:  
; APPLICANT: Greisen, Kay S.  
; APPLICANT: Leong, Diane U.  
; TITLE OF INVENTION: Methods and Reagents for Detection of  
; TITLE OF INVENTION: Bacteria in Cerebrospinal Fluid  
; NUMBER OF SEQUENCES: 48  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hoffmann-La Roche Inc.  
; STREET: 340 Kingsland Street  
; CITY: Nutley  
; STATE: NJ  
; COUNTRY: U.S.A.  
; ZIP: 07110-1199  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/244,269  
; FILING DATE: 05-MAY-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/593,176  
; FILING DATE: 05-OCT-1990  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/696,448  
; FILING DATE: 06-MAY-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/738,393  
; FILING DATE: 31-JULY-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US 92/06365  
; FILING DATE: 31-JULY-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Sias, Stacey R.  
; REGISTRATION NUMBER: 32,630  
; REFERENCE/DOCKET NUMBER: 8681  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (510) 814-2863  
; TELEFAX: (510) 522-1285  
; INFORMATION FOR SEQ ID NO: 35:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 23 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-244-269-35

Query Match 0.9%; Score 15.6; DB 1; Length 23;  
Best Local Similarity 81.8%; Pred. No. 1.9e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



```
; FILING DATE: 12/2/93
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Esmond, Robert W.
; REGISTRATION NUMBER: 32,893
; REFERENCE/DOCKET NUMBER: 0942.2580000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 49:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: both
; US-08-160-670A-49

Query Match          0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 2e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      233 GTGGTGGTGGCGGAGTGACCC 254
          |||||
Db      24 GTGGTGGTGGTGGTGAGACC 3

RESULT 49
US-09-827-998-544
; Sequence 544, Application US/09827998
; Patent No. 6656700
; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; APPLICANT: Shannon, Mark
; TITLE OF INVENTION: NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN E
; FILE REFERENCE: MDMORF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; CURRENT FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Aeomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 544
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-544

Query Match          0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      287 AACTTCGTTCTGCACGG 303
          |||||
Db      1 AACTTCGTTCTGCACGG 17

RESULT 50
US-08-776-900C-24/c
; Sequence 24, Application US/08776900C
; Patent No. 6020477
; GENERAL INFORMATION:
; APPLICANT: DIU, Anita; FAUCHEU, Chi; Hercend, Thierry;
; APPLICANT: LALANNE, Jean-Louis; LIVINGSTON, David and
; APPLICANT: SU, Michael
; TITLE OF INVENTION: DNA SEQUENCES CODING FOR THE HUMAN
; TITLE OF INVENTION: PROTEINS TX AND TY RELATED TO THE
; TITLE OF INVENTION: INTERLEUKIN-1BETA CONVERTING ENZYME
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BIERMAN & MUSERLIAN
```

```
; STREET: 600 THIRD AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10016
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,900C
; FILING DATE: 30-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/FR95/01035
; FILING DATE: 01-AUG-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: FR/94/09567
; FILING DATE: 02-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: CHARLES A. MUSERLIAN
; REGISTRATION NUMBER: 19,683
; REFERENCE/DOCKET NUMBER: 146.1265
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 661-8000
; TELEFAX: (212) 661-8002
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; OTHER INFORMATION: SEQ ID NO: 22 from 685 to 703
; US-08-776-900C-24

Query Match          0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1436 AGGATGCGCATGAACAT 1452
          |||||
Db      18 AGGATGCGCATGAGACAT 2

RESULT 51
US-09-268-195C-24/c
; Sequence 24, Application US/09268195C
; Patent No. 6180386
; GENERAL INFORMATION:
; APPLICANT: ROUSSEL UCLAF
; TITLE OF INVENTION: DNA SEQUENCES CODING FOR THE HUMAN
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ROUSSEL UCLAF
; STREET: 102, Route de No. 6180386sy
; CITY: ROMAINVILLE
; COUNTRY: FRANCE
; ZIP: 93230
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30 (OEB)
; SOFTWARE: + Corrections under WORDPERFECT 5.1 for SEQ ID NO 22
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/268,195C
; FILING DATE: 15-MAR-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: FR 9409567
; FILING DATE: AUG-02-1994
```

```

STATE: MA
COUNTRY: USA
ZIP: 02109-2891
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/846,020A
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Jarrell Ph.D., Brenda H.
REGISTRATION NUMBER: 39,223
REFERENCE/DOCKET NUMBER: 0092662-0012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-5000
TELEFAX: (617) 248 4000
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "primer"
IMMEDIATE SOURCE:
CLONE: Exon 5 sense primer
US-08-846-020A-24

Query Match 0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0

QY 992 AGAAGCTGCTCATCAAC 1008
Db ||||| |||||
4 AGAAGCTGTTTCATCAAC 20

RESULT 54
US-09-617-871-24
; Sequence 24, Application US/09617871
; Patent No. 6355434
; GENERAL INFORMATION:
; APPLICANT: Drazen M.D., Jeffrey M.
; APPLICANT: In M.D., Kwang-Ho
; APPLICANT: Asano M.D., Koichiro
; APPLICANT: Beier, David
; APPLICANT: Grobholz, James
; TITLE OF INVENTION: 5-Lipoxygenase Gene Sequence
; TITLE OF INVENTION: Polymorphisms and Their Use in Classifying Patients
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CHOATE, HALL & STEWART
; STREET: 53 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2891
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/617,871
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/846,020
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:

```

```
; NAME: Jarrell Ph.D., Brenda H.
; REGISTRATION NUMBER: 39,223
; REFERENCE/DOCKET NUMBER: 0092662-0012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 248-5000
; TELEFAX: (617) 248-5000
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "primer"
; IMMEDIATE SOURCE:
; CLONE: Exon 5 sense primer
US-09-617-871-24

Query Match      0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 992 AGAAGCTGCTCATCAAC 1008
Db 4 AGAAGCTGCTCATCAAC 20

RESULT 55
US-09-065-040-6/c
; Sequence 6, Application US/09065040
; Patent No. 6541217
; GENERAL INFORMATION:
; APPLICANT: Hiraoka, Atsunobu
; APPLICANT: Sugimura, Atsushi
; APPLICANT: Mi, Hiroyuki
; TITLE OF INVENTION: HEMATOPOIETIC STEM CELL GROWTH FACTOR
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT &
; STREET: 1300 I Street, NW
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/065,040
; FILING DATE: 27-APR-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 262252/1996
; FILING DATE: 27-AUG-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 087242/1997
; FILING DATE: 24-MAR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/JP97/02349
; FILING DATE: 07-JUL-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fordie, Jean B.
; REGISTRATION NUMBER: 32,984
; REFERENCE/DOCKET NUMBER: 04853.0026-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
```

---

```
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic DNA"
US-09-065-040-6

Query Match      0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 614 CCTACATTAAGCTGGAC 630
Db 19 CCTGCATTAAGCTGGAC 3

RESULT 56
US-09-657-472-2081
; Sequence 2081, Application US/09657472
; Patent No. 6727063
; GENERAL INFORMATION:
; APPLICANT: Lander, Eric S.
; APPLICANT: Cargill, Michele
; APPLICANT: Ireland, James S.
; APPLICANT: Bolk, Stacey
; APPLICANT: Daley, George Q.
; APPLICANT: McCarthy, Jeanette J.
; TITLE OF INVENTION: SINGLE NUCLEOTIDE POLYMORPHISMS IN GENES
; FILE REFERENCE: 2825.1027-001
; CURRENT APPLICATION NUMBER: US/09/657,472
; CURRENT FILING DATE: 2000-09-07
; PRIOR APPLICATION NUMBER: US 60/153,357
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/220,947
; PRIOR FILING DATE: 2000-07-26
; PRIOR APPLICATION NUMBER: US 60/225,724
; PRIOR FILING DATE: 2000-08-16
; NUMBER OF SEQ ID NOS: 2551
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2081
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-657-472-2081

Query Match      0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 1.8e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGCCTGG 1045
Db 3 CTCGGTGATTTGGCCTGG 21

RESULT 57
US-09-198-243-2
; Sequence 2, Application US/09198243
; Patent No. 6183999
; GENERAL INFORMATION:
; APPLICANT: WEIMER, Thomas
; APPLICANT: GROENER, Albrecht
; TITLE OF INVENTION: Procedure for the detection of high virus
; TITLE OF INVENTION: concentrations in blood plasma and/or blood serum by
; TITLE OF INVENTION: means of the polymerase chain reaction
; FILE REFERENCE: 06478.1419-00000
; CURRENT APPLICATION NUMBER: US/09/198,243
; CURRENT FILING DATE: 1998-11-24
; EARLIER APPLICATION NUMBER: P 197 52 898.9
; EARLIER FILING DATE: 1997-11-28
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 23
```



```
; TYPE: DNA
; ORGANISM: Parvovirus B19
; FEATURE:
; OTHER INFORMATION:
US-09-198-243-2

Query Match          0.9%; Score 15.4; DB 1; Length 23;
Best Local Similarity 94.1%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1226 AGGACAGCTACATTC 1242
    ||| ||||| |||||
Db 2 AGGCACAGCTACATTC 18

RESULT 58
US-08-009-263C-34/c
; Sequence 34, Application US/0809263C
; Patent No. 5442049
; GENERAL INFORMATION:
; APPLICANT: Kevin Anderson, Kenneth Draper, Brenda Baker
; TITLE OF INVENTION: Oligonucleotides for Modulating the
; TITLE OF INVENTION: Effects of Cytomegalovirus Infections
; NUMBER OF SEQUENCES: 88
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz
; ADDRESSEE: Mackiewicz & No. 5442049ris
; STREET: One Liberty Place -- 46th floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: WORDPERCT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/009,263C
; FILING DATE: January 25, 1993
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 927,506
; FILING DATE: No. 5442049ember 19, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISIS-0844
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 34:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHEetical: NO
; ANTI-SENSE: YES
US-08-009-263C-34

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGTCAACG 149
    ||| ||||| |||||
Db 20 CGCAAGAAGAGCAACG 1

RESULT 59
US-09-357-072-81

; Sequence 81, Application US/09357072
; Patent No. 6015712
; GENERAL INFORMATION:
; APPLICANT: Brett P. Monia
; APPLICANT: Brenda F. Baker
; APPLICANT: Hong Zhang
; APPLICANT: Lex M. Cowbert
; TITLE OF INVENTION: ANTISENSE MODULATION OF FADD EXPRESSION
; FILE REFERENCE: RTS-0027
; CURRENT APPLICATION NUMBER: US/09/357,072
; CURRENT FILING DATE: 1999-07-19
; NUMBER OF SEQ ID NOS: 87
; SEQ ID NO 81
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-357-072-81

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 46 GGACCAGCAGTGTGACTGCT 65
    ||| ||||| |||||
Db 1 GGAGTAACAGTGTGACTGCT 20

RESULT 60
US-09-205-428-3
; Sequence 3, Application US/09205428
; Patent No. 6068991
; GENERAL INFORMATION:
; APPLICANT: Liu, Suo W.
; APPLICANT: Franceschini, Thomas J.
; TITLE OF INVENTION: HIGH EXPRESSION ESCHERICHIA COLI EXPRESSION VECTOR
; FILE REFERENCE: ON0162aSequence
; CURRENT APPLICATION NUMBER: US/09/205,428
; CURRENT FILING DATE: 1998-12-04
; EARLIER APPLICATION NUMBER: 60/069,751
; EARLIER FILING DATE: 1997-12-16
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Escherichia coli
US-09-205-428-3

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1433 CAGAGGATGCCATGAACAT 1452
    ||||| ||||| |||||
Db 1 CAGAGGATATCATGAACAT 20

RESULT 61
US-09-286-904-29/c
; Sequence 29, Application US/09286904A
; Patent No. 6140124
; GENERAL INFORMATION:
; APPLICANT: Monia, Brett P.
; APPLICANT: Gaarde, William A.
; APPLICANT: Nero, Pamela S.
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: Antisense Oligonucleotide Modulation of p38 Mitogen
; TITLE OF INVENTION: Activated Protein Kinase Expression
; FILE REFERENCE: ISPH-0347
; CURRENT APPLICATION NUMBER: US/09/286,904A
; CURRENT FILING DATE: 1999-04-06
```

NUMBER OF SEQ ID NOS: 95  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 29  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: antisense sequence  
US-09-286-904-29

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAGGACCTCAAAAC 783  
|||  
Db 20 TGCTCAGGACCTGAGCAC 1

RESULT 62  
US-08-838-715B-34/c  
; Sequence 34, Application US/08838715B  
; Patent No. 6153595  
; GENERAL INFORMATION:  
; APPLICANT: Draper, Chapman, Kisner, Anderson  
; TITLE OF INVENTION: Composition and Method for Treatment  
; TITLE OF INVENTION: of CMV Infection  
; NUMBER OF SEQUENCES: 90  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Jane Massey Licata, Esq.  
; STREET: 66 E. Main Street  
; CITY: Marlton  
; STATE: NJ  
; COUNTRY: USA  
; ZIP: 08053

COMPUTER READABLE FORM:  
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE  
; COMPUTER: IBM 486  
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS  
; SOFTWARE: WORDPERFECT 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,715B  
; FILING DATE: April 9, 1997  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/568,366  
; FILING DATE: 8/16/90  
; APPLICATION NUMBER: 07/927,506  
; FILING DATE: 11/19/92  
; APPLICATION NUMBER: 08/009,263  
; FILING DATE: 1/25/93  
; APPLICATION NUMBER: 08/233,711  
; FILING DATE: 4/26/94  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Jane Massey Licata  
; REGISTRATION NUMBER: 32,257  
; REFERENCE/DOCKET NUMBER: ISPH-0204  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (609) 810-1454  
; TELEFAX: (609) 779-2400  
; INFORMATION FOR SEQ ID NO: 34:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; HYPOTHETICAL: NO  
; ANTI-SENSE: YES  
US-08-838-715B-34

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAAGAAGATCAACG 149  
|||  
Db 20 CGCAAGAAGAAGAGCAACG 1

RESULT 63  
US-08-838-715B-89/c  
; Sequence 89, Application US/08838715B  
; Patent No. 6153595  
; GENERAL INFORMATION:  
; APPLICANT: Draper, Chapman, Kisner, Anderson  
; TITLE OF INVENTION: Composition and Method for Treatment  
; TITLE OF INVENTION: of CMV Infection  
; NUMBER OF SEQUENCES: 90  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Jane Massey Licata, Esq.  
; STREET: 66 E. Main Street  
; CITY: Marlton  
; STATE: NJ  
; COUNTRY: USA  
; ZIP: 08053

COMPUTER READABLE FORM:  
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE  
; COMPUTER: IBM 486  
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS  
; SOFTWARE: WORDPERFECT 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,715B  
; FILING DATE: April 9, 1997  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/568,366  
; FILING DATE: 8/16/90  
; APPLICATION NUMBER: 07/927,506  
; FILING DATE: 11/19/92  
; APPLICATION NUMBER: 08/009,263  
; FILING DATE: 1/25/93  
; APPLICATION NUMBER: 08/233,711  
; FILING DATE: 4/26/94  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Jane Massey Licata  
; REGISTRATION NUMBER: 32,257  
; REFERENCE/DOCKET NUMBER: ISPH-0204  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (609) 810-1454  
; TELEFAX: (609) 779-2400  
; INFORMATION FOR SEQ ID NO: 89:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
US-08-838-715B-89

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAAGAAGATCAACG 149  
|||  
Db 20 CGCAAGAAGAAGAGCAACG 1

RESULT 64  
US-09-359-756-8  
; Sequence 8, Application US/09359756  
; Patent No. 6168950  
; GENERAL INFORMATION:

```

; APPLICANT: Brett P. Monia
; APPLICANT: William Gaarde
; APPLICANT: Donna T. Ward
; APPLICANT: Lex M. Cowsett
; TITLE OF INVENTION: ANTISENSE MODULATION OF MEK1 EXPRESSION
; FILE REFERENCE: RTS-0077
; CURRENT APPLICATION NUMBER: US/09/359,756
; CURRENT FILING DATE: 1999-07-23
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 8
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-359-756-8

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 552 GCCCTCAGCGCGCCTCC 571
Db 1 GCTCTCGCGCGCCTGC 20

RESULT 65
US-08-679-645-1259/c
; Sequence 1259, Application US/08679645
; Patent No. 6350934
; GENERAL INFORMATION:
; APPLICANT: Zwick, Michael G.
; APPLICANT: Edington, Brent E.
; APPLICANT: McSwiggen, James A.
; APPLICANT: Merlo, Patricia Ann Owens
; APPLICANT: Guo, Lining
; APPLICANT: Skokut, Thomas A.
; APPLICANT: Young, Scott A.
; APPLICANT: Folkerts, Otto
; APPLICANT: Merlo, Donald J.
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR
; TITLE OF INVENTION: MODULATION OF GENE EXPRESSION
; TITLE OF INVENTION: IN PLANTS
; NUMBER OF SEQUENCES: 1263
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/679,645
; FILING DATE: July 12, 1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/001,135
; FILING DATE: July 13, 1995
; APPLICATION NUMBER: 08/300,726
; FILING DATE: September 2, 1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 219/247
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600

; APPLICANT: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 1259:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-679-645-1259

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 377 CTTGAGCCAGCTCTCGGAT 396
Db 20 CATGACCCAGCATCGGAT 1

RESULT 66
US-09-580-189-14/c
; Sequence 14, Application US/09580189
; Patent No. 6358688
; GENERAL INFORMATION:
; APPLICANT: Lim, David J.
; APPLICANT: Chun, Young-Myoung
; APPLICANT: Rhim, John S.
; TITLE OF INVENTION: IMMORTALIZED HUMAN MIDDLE EAR EPITHELIAL CELL LINE
; FILE REFERENCE: House Ear Institute/09902812
; CURRENT APPLICATION NUMBER: US/09/580,189
; CURRENT FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/136,736
; PRIOR FILING DATE: 1999-05-28
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-580-189-14

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1326 CAAGTACCGAGCGAGGCC 1345
Db 20 CAAGTACTCAGCAGAGGCC 1

RESULT 67
US-09-702-327-54/c
; Sequence 54, Application US/09702327
; Patent No. 6426220
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Lex M. Cowsett
; TITLE OF INVENTION: ANTISENSE MODULATION OF CALRETICULIN EXPRESSION
; FILE REFERENCE: RTS-0097
; CURRENT APPLICATION NUMBER: US/09/702,327
; CURRENT FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 89
; SEQ ID NO 54
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-702-327-54

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

QY 540 CATCTTTGACAGCCCTCA 559  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 CATCTTTGACAACTTCTCA 1

RESULT 68  
US-09-792-594-83/c  
; Sequence 83, Application US/09792594  
; Patent No. 6436706  
; GENERAL INFORMATION:  
; APPLICANT: Donna T. Ward  
; APPLICANT: Andrew T. Watt  
; TITLE OF INVENTION: ANTISENSE MODULATION OF RECQL4 EXPRESSION  
; FILE REFERENCE: RTS-0209  
; CURRENT APPLICATION NUMBER: US/09/792,594  
; CURRENT FILING DATE: 2001-02-23  
; NUMBER OF SEQ ID NOS: 89  
; SEQ ID NO 83  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-792-594-83

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1160 GGGGTGTGGCTGCATCTTC 1179  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 GGGCTGTGGCCCGCATCTTC 1

RESULT 69  
US-09-676-610B-172  
; Sequence 172, Application US/09676610B  
; Patent No. 6444465  
; GENERAL INFORMATION:  
; APPLICANT: C. Frank Bennett  
; APPLICANT: Jacqueline Wyatt  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: OLIGONUCLEOTIDE INHIBITION OF HER-1 EXPRESSION  
; FILE REFERENCE: RTS-0138  
; CURRENT APPLICATION NUMBER: US/09/676,610B  
; CURRENT FILING DATE: 2000-09-29  
; NUMBER OF SEQ ID NOS: 182  
; SEQ ID NO 172  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-676-610B-172

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 950 ACTGCCACCGGAGAGGTG 969  
| | | | | | | | | | | | | | | | | | | | | |  
Db 1 AATGCCACCGCAGGATGTG 20

RESULT 70  
US-09-640-101-29/c  
; Sequence 29, Application US/09640101  
; Patent No. 6448079  
; GENERAL INFORMATION:  
; APPLICANT: Monia, Brett P.  
; APPLICANT: Gaarde, William A.  
; APPLICANT: Nero, Pamela S.

; APPLICANT: McKay, Robert  
; TITLE OF INVENTION: Antisense Modulation of p38 Mitogen  
; TITLE OF INVENTION: Activated Protein Kinase Expression  
; FILE REFERENCE: ISPH-0488  
; CURRENT APPLICATION NUMBER: US/09/640,101  
; CURRENT FILING DATE: 2000-08-15  
; PRIOR APPLICATION NUMBER: 09/286,904  
; PRIOR FILING DATE: 1999-04-06  
; NUMBER OF SEQ ID NOS: 107  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 29  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: antisense sequence  
US-09-640-101-29

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAAGCAGCTCAACAC 783  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 TGCTCAAGCAGCTGAAGCAC 1

RESULT 71  
US-09-860-473-163/c  
; Sequence 163, Application US/09860473  
; Patent No. 6656732  
; GENERAL INFORMATION:  
; APPLICANT: C. Frank Bennett  
; APPLICANT: Andrew T. Watt  
; TITLE OF INVENTION: ANTISENSE MODULATION OF SRC-C EXPRESSION  
; FILE REFERENCE: RTS-0222  
; CURRENT APPLICATION NUMBER: US/09/860,473  
; CURRENT FILING DATE: 2001-05-18  
; NUMBER OF SEQ ID NOS: 169  
; SEQ ID NO 163  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-860-473-163

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGGCC 1047  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 TGGCCGACTTTGGGTTGGCC 1

RESULT 72  
US-09-133-352B-11  
; Sequence 11, Application US/09133352B  
; Patent No. 6703209  
; GENERAL INFORMATION:  
; APPLICANT: Manfred Baetscher  
; APPLICANT: Gottfried Brem  
; TITLE OF INVENTION: Porcine Totipotent Cells and Method for Long-Term Culture  
; FILE REFERENCE: 61750-212  
; CURRENT APPLICATION NUMBER: US/09/133,352B  
; CURRENT FILING DATE: 1998-08-13  
; PRIOR APPLICATION NUMBER: US 60/055643  
; PRIOR FILING DATE: 1997-08-14  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: Microsoft Word 6.0  
; SEQ ID NO 11  
; LENGTH: 20

; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; NAME/KEY:  
; LOCATION:  
; OTHER INFORMATION: PCR primer  
US-09-133-352B-11

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 424 ATGGCAACCATCCCAACG 443  
||||| ||||| ||||| |||||  
Db 1 ATGGCAACCATCCCAAG 20

RESULT 73  
US-08-009-263C-22/c  
; Sequence 22, Application US/08009263C  
; Patent No. 5442049  
; GENERAL INFORMATION:  
; APPLICANT: Kevin Anderson, Kenneth Draper, Brenda Baker  
; TITLE OF INVENTION: Oligonucleotides for Modulating the  
; TITLE OF INVENTION: Effects of Cytomegalovirus Infections  
; NUMBER OF SEQUENCES: 88  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz  
; ADDRESSEE: Mackiewicz & No. 5442049ris  
; STREET: One Liberty Place -- 46th floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: USA  
; ZIP: 19103

COMPUTER READABLE FORM:  
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE  
; COMPUTER: IBM PS/2  
; OPERATING SYSTEM: PC-DOS  
; SOFTWARE: WORDPERFECT 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/009,263C  
; FILING DATE: January 25, 1993  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 927,506  
; FILING DATE: No. 5442049ember 19, 1992

ATTORNEY/AGENT INFORMATION:  
; NAME: Jane Massey Licata  
; REGISTRATION NUMBER: 32,257  
; REFERENCE/DOCKET NUMBER: ISIS-0844  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (215) 568-3100  
; TELEFAX: (215) 568-3439  
; INFORMATION FOR SEQ ID NO: 22:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; HYPOTHETICAL: NO  
; ANTI-SENSE: YES  
US-08-009-263C-22

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
||||| ||||| ||||| |||||  
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 74  
US-08-009-263C-88  
; Sequence 88, Application US/08009263C  
; Patent No. 5442049  
; GENERAL INFORMATION:  
; APPLICANT: Kevin Anderson, Kenneth Draper, Brenda Baker  
; TITLE OF INVENTION: Oligonucleotides for Modulating the  
; TITLE OF INVENTION: Effects of Cytomegalovirus Infections  
; NUMBER OF SEQUENCES: 88  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz  
; ADDRESSEE: Mackiewicz & No. 5442049ris  
; STREET: One Liberty Place -- 46th floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: USA  
; ZIP: 19103

COMPUTER READABLE FORM:  
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE  
; COMPUTER: IBM PS/2  
; OPERATING SYSTEM: PC-DOS  
; SOFTWARE: WORDPERFECT 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/009,263C  
; FILING DATE: January 25, 1993  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 927,506  
; FILING DATE: No. 5442049ember 19, 1992

ATTORNEY/AGENT INFORMATION:  
; NAME: Jane Massey Licata  
; REGISTRATION NUMBER: 32,257  
; REFERENCE/DOCKET NUMBER: ISIS-0844  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (215) 568-3100  
; TELEFAX: (215) 568-3439  
; INFORMATION FOR SEQ ID NO: 88:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
US-08-009-263C-88

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
||||| ||||| ||||| |||||  
Db 1 CGCAAGAGAGAGCAACG 20

RESULT 75  
US-08-468-447-7/c  
; Sequence 7, Application US/08468447  
; Patent No. 5576302  
; GENERAL INFORMATION:  
; APPLICANT: Phillip Dan Cook and Glenn Hoke  
; TITLE OF INVENTION: Oligonucleotides for Modulating  
; TITLE OF INVENTION: Hepatitis C Virus Having Phosphorothioate Linkages Of High Chi  
; TITLE OF INVENTION: Purity  
; NUMBER OF SEQUENCES: 16  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5576302ris  
; STREET: One Liberty Place - 46th Floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: U.S.A.  
; ZIP: 19103

```

; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/468,447
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 297,703
; FILING DATE: 29-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2008
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-468-447-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAACG 2

RESULT 76
US-08-469-851A-7/c
; Sequence 7, Application US/08469851A
; Patent No. 5587361
; GENERAL INFORMATION:
; APPLICANT: Cook and Hoke
; TITLE OF INVENTION: OLIGONUCLEOTIDES HAVING PHOSPHOROTHIOATE
; TITLE OF INVENTION: LINKAGES OF HIGH CHIRAL PURITY
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5587361iris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,851A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 297,703
; FILING DATE: 29-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 7:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 21
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-469-851A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAACG 2

RESULT 77
US-07-927-506-22/c
; Sequence 22, Application US/07927506
; Patent No. 5591720
; GENERAL INFORMATION:
; APPLICANT: Anderson, Kevin P.
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: Oligonucleotides for Modulating
; TITLE OF INVENTION: the Effects of Cytomegalovirus Infections
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &
; ADDRESSEE: No. 5591720iris
; STREET: One Liberty Place -- 46th floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb
; MEDIUM TYPE: STORAGE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: WORDPERFECT 5.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/927,506
; FILING DATE: 19921119
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Licata, Jane M.
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISIS-0408
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-07-927-506-22

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAACG 2

RESULT 78

```

US-08-233-711-1/c  
; Sequence 1, Application US/08233711  
; Patent No. 5595978  
; GENERAL INFORMATION:  
; APPLICANT: Draper, Chapman and Kisner  
; TITLE OF INVENTION: Composition and Method for Treating  
; TITLE OF INVENTION: CMV Infections  
; NUMBER OF SEQUENCES: 1  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Jane Massey Licata, Esq.  
; STREET: 210 Lake Drive East, Suite 201  
; CITY: Cherry Hill  
; STATE: NJ  
; COUNTRY: USA  
; ZIP: 08002  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE  
; COMPUTER: IBM 486  
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS  
; SOFTWARE: WORDPERFECT 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/233.711  
; FILING DATE: herewith  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/568,366  
; FILING DATE: 8/16/90  
; APPLICATION NUMBER: PCT/US91/05815  
; FILING DATE: 8/14/91  
; APPLICATION NUMBER: 07/927,506  
; FILING DATE: 11/19/92  
; APPLICATION NUMBER: 08/009,263  
; FILING DATE: 1/25/93  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Jane Massey Licata  
; REGISTRATION NUMBER: 32,257  
; REFERENCE/DOCKET NUMBER: ISPH-0093  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (609) 779-2400  
; TELEFAX: (609) 779-8488  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; HYPOTHETICAL: NO  
; ANTI-SENSE: YES  
US-08-233-711-1  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAAGAAATCAACG 149  
Db 21 CGCAAGAGAGAGCAACG 2  
RESULT 79  
US-08-467-597A-7/c  
; Sequence 7, Application US/08467597A  
; Patent No. 5607923  
; GENERAL INFORMATION:  
; APPLICANT: Phillip Dan Cook and Glenn Hoke  
; TITLE OF INVENTION: Oligonucleotides For Modulating  
; TITLE OF INVENTION: Cytomegalovirus Having Phosphorothioate Linkages Of High Chir  
; TITLE OF INVENTION: Purity  
; NUMBER OF SEQUENCES: 16  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5607923ris  
; STREET: One Liberty Place - 46th Floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: U.S.A.  
; ZIP: 19103  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5 inch disk, 720 Kb  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: WordPerfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/468,569A  
; FILING DATE: 06-JUN-1995  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 297,703  
; FILING DATE: 29-AUG-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Joseph Lucci  
; REGISTRATION NUMBER: 33,307

CITY: Philadelphia  
STATE: PA  
COUNTRY: U.S.A.  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch disk, 720 Kb  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WordPerfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/467,597A  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 297,703  
FILING DATE: 29-AUG-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Joseph Lucci  
REGISTRATION NUMBER: 33,307  
REFERENCE/DOCKET NUMBER: ISIS-2007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3439  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-467-597A-7  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAAGAAATCAACG 149  
Db 21 CGCAAGAGAGAGCAACG 2  
RESULT 80  
US-08-468-569A-7/c  
; Sequence 7, Application US/08468569A  
; Patent No. 5620963  
; GENERAL INFORMATION:  
; APPLICANT: Cook and Hoke  
; TITLE OF INVENTION: OLIGONUCLEOTIDES FOR MODULATING PROTEIN  
; TITLE OF INVENTION: KINASE C HAIVING PHOSPHOROTHIOATE LINKAGES  
; TITLE OF INVENTION: AND HIGH CHIRAL PURITY  
; NUMBER OF SEQUENCES: 16  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5620963ris  
; STREET: One Liberty Place - 46th Floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: U.S.A.  
; ZIP: 19103  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5 inch disk, 720 Kb  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: WordPerfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/468,569A  
; FILING DATE: 06-JUN-1995  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 297,703  
; FILING DATE: 29-AUG-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Joseph Lucci  
; REGISTRATION NUMBER: 33,307

REFERENCE/DOCKET NUMBER: ISIS-2009  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3439  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-468-569A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149  
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 81  
US-08-113-993A-1/c  
Sequence 1, Application US/08113993A  
Patent No. 5629150  
GENERAL INFORMATION:  
APPLICANT: Tadeusz Kzysztow Wyrzykiewicz  
TITLE OF INVENTION: METHODS FOR CHARACTERIZING  
TITLE OF INVENTION: PHOSPHOROTHIOATE OLIGONUCLEOTIDES  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &  
ADDRESS: No. 5629150ris  
STREET: One Liberty Place - 46th Floor  
CITY: Philadelphia  
STATE: PA  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE  
COMPUTER: IBM PS/2  
OPERATING SYSTEM: PC-DOS  
SOFTWARE: WORDPERFECT 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/113,993A  
FILING DATE: August 30, 1993  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:

ATTORNEY/AGENT INFORMATION:  
NAME: John W. Caldwell  
REGISTRATION NUMBER: 28,937  
REFERENCE/DOCKET NUMBER: ISIS-1118  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (215) 568-3100  
TELEFAX: (215) 568-3439  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21  
TYPE: nucleotide  
STRANDEDNESS: single  
TOPOLOGY: unknown  
US-08-113-993A-1

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149  
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 82  
US-08-466-692A-7/c  
Sequence 7, Application US/08466692A  
Patent No. 5654284  
GENERAL INFORMATION:  
APPLICANT: Cook and Hoke  
TITLE OF INVENTION: OLIGONUCLEOTIDES FOR MODULATING RAF KINASE  
TITLE OF INVENTION: HAVING PHOSPHOROTHIOATE LINKAGES OF HIGH  
TITLE OF INVENTION: CHIRAL PURITY  
NUMBER OF SEQUENCES: 16  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5654284ris  
STREET: One Liberty Place - 46th Floor  
CITY: Philadelphia  
STATE: PA  
COUNTRY: U.S.A.  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch disk, 720 Kb  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WordPerfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/466,692A  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 297,703  
FILING DATE: 29-AUG-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Joseph Lucci  
REGISTRATION NUMBER: 33,307  
REFERENCE/DOCKET NUMBER: ISIS-2010  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-568-3100  
TELEFAX: 215-568-3439  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-466-692A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149  
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 83  
US-08-471-966A-7/c  
Sequence 7, Application US/08471966A  
Patent No. 5661134  
GENERAL INFORMATION:  
APPLICANT: Phillip Dan Cook and Glenn Hoke  
TITLE OF INVENTION: Oligonucleotides For Modulating Ha-ras or  
TITLE OF INVENTION: Ki-ras Having Phosphorothioate Linkages Of High Chiral Purity  
NUMBER OF SEQUENCES: 16  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5661134ris  
STREET: One Liberty Place - 46th Floor  
CITY: Philadelphia  
STATE: PA  
COUNTRY: U.S.A.  
ZIP: 19103  
COMPUTER READABLE FORM:



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; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/471,966A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 297,703
; FILING DATE: 29-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucchi
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2011
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-471-966A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAGACCAACG 2

RESULT 84
US-08-784-498-1/c
; Sequence 1, Application US/08784498
; Patent No. 5767102
; GENERAL INFORMATION:
; APPLICANT: Draper, Chapman and Kisser
; TITLE OF INVENTION: Composition and Method for Treating
; NUMBER OF INVENTIONS: CMV Infections
; NUMBER OF SEQUENCES: 1
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Jane Massey Licata, Esq.
; STREET: 210 Lake Drive East, Suite 201
; CITY: Cherry Hill
; STATE: NJ
; COUNTRY: USA
; ZIP: 08002
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM 486
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/784,498
; FILING DATE: 17-JAN-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/233,711
; FILING DATE: 26-APR-1994
; APPLICATION NUMBER: 07/568,366
; FILING DATE: 8/16/90 PCT/US91/05815
; APPLICATION NUMBER: 07/927,506
; FILING DATE: 11/19/92
; APPLICATION NUMBER: 08/009,263
; FILING DATE: 1/25/93
; ATTORNEY/AGENT INFORMATION:

NAME: Jane Massey Licata
REGISTRATION NUMBER: 32,257
REFERENCE/DOCKET NUMBER: ISPH-0093
TELEPHONE: (609) 779-2400
TELEFAX: (609) 779-8488
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-784-498-1

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAGACCAACG 2

RESULT 85
US-08-451-777A-10
; Sequence 10, Application US/08451777A
; Patent No. 5789223
; GENERAL INFORMATION:
; APPLICANT: Bergsma, Derk J.
; TITLE OF INVENTION: Human Galactokinase Gene
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corp./Corporate
; STREET: Intellectual Property
; STREET: 709 Swedeland Road/UW2220
; CITY: King of Prussia
; STATE: Pennsylvania
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/451,777A
; FILING DATE: 26-MAY-1995
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/10825
; FILING DATE: 23-SEP-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Eagle, Alissa M.
; REGISTRATION NUMBER: 37,126
; REFERENCE/DOCKET NUMBER: P50268-1B
; TELEPHONE: 610-270-5364
; TELEFAX: 610-270-5090
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-451-777A-10

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;

```

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGGTGGCTGG 946  
|||||  
Db 2 CCAGCAGCTCCGGCAGCTGG 21

## RESULT 86

US-08-249-386A-24/c  
; Sequence 24, Application US/08249386A  
; Patent No. 5801235  
; GENERAL INFORMATION:  
; APPLICANT: Gregory S. Pari  
; TITLE OF INVENTION: Oligonucleotides with Anti-Cytomegalovirus  
; NUMBER OF SEQUENCES: 24  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lappin & Kusner  
; STREET: 200 State Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: USA  
; ZIP: 02109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: US/08/249,386A  
; FILING DATE: May 25, 1994  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Kerneer, Ann-Louise  
; REGISTRATION NUMBER: 33,523  
; REFERENCE/DOCKET NUMBER: HYZ-020  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-330-1300  
; TELEFAX: 617-330-1311  
; INFORMATION FOR SEQ ID NO: 24:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; HYPOTHETICAL: NO  
; ANTI-SENSE: YES  
US-08-249-386A-24

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
|||  
Db 21 CGCAAGAAGAGAGCAACG 2

## RESULT 87

US-08-451-778A-10  
; Sequence 10, Application US/08451778A  
; Patent No. 5830649  
; GENERAL INFORMATION:  
; APPLICANT: Bergsma, Derk J.  
; APPLICANT: Strambolian, Dwight  
; TITLE OF INVENTION: Human Galactokinase Gene  
; NUMBER OF SEQUENCES: 33  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: SmithKline Beecham Corp./Corporate  
; ADDRESSEE: Intellectual Property  
; STREET: 709 Swedeland Road/UW2220  
; CITY: King of Prussia

; STATE: Pennsylvania  
; COUNTRY: USA  
; ZIP: 19406-0939  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/451,778A  
; FILING DATE: 26-MAY-1995  
; CLASSIFICATION: 800  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US94/10825  
; FILING DATE: 23-SEP-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Eagle, Aliessa M.  
; REGISTRATION NUMBER: 37,126  
; REFERENCE/DOCKET NUMBER: P50268-1B  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 610-270-5364  
; TELEFAX: 610-270-5090  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-451-778A-10

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGGTGGCTGG 946  
|||||  
Db 2 CCAGCAGCTCCGGCAGCTGG 21

## RESULT 88

US-08-468-037A-18/c  
; Sequence 18, Application US/08468037A  
; Patent No. 5859221  
; GENERAL INFORMATION:  
; APPLICANT: Phillip Dan Cook  
; APPLICANT: A. Kawasaki  
; TITLE OF INVENTION: 2'-Modified Oligonucleotides  
; NUMBER OF SEQUENCES: 37  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5859221ris  
; STREET: One Liberty Place - 46th Floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: U.S.A.  
; ZIP: 19103  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5 inch disk, 720 Kb  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Wordperfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/468,037A  
; FILING DATE: 06-JUN-1995  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 835,932  
; FILING DATE: 05-MAR-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Joseph Iucci  
; REGISTRATION NUMBER: 33,307  
; REFERENCE/DOCKET NUMBER: ISIS-2004  
; TELECOMMUNICATION INFORMATION:

```

; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
US-08-468-037A-18

Query Match
Best Local Similarity 0.9%; Score 15.2; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGCAACG 2

RESULT 89
US-08-468-037A-19/c
; Sequence 19, Application US/08468037A
; Patent No. 5859221
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: A. Kawasaki
; TITLE OF INVENTION: 2'-Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5859221ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/468,037A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 835,932
; FILING DATE: 05-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
US-08-468-037A-19

Query Match
Best Local Similarity 0.9%; Score 15.2; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGCAACG 2

RESULT 90
US-08-471-973A-18/c
; Sequence 18, Application US/08471973A
; Patent No. 5872232
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: Andrew Kawasaki
; TITLE OF INVENTION: Sugar Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5872232ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/471,973A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 835,932
; FILING DATE: 05-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
US-08-471-973A-18

Query Match
Best Local Similarity 0.9%; Score 15.2; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGCAACG 2

RESULT 91
US-08-471-973A-19/c
; Sequence 19, Application US/08471973A
; Patent No. 5872232
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: Andrew Kawasaki
; TITLE OF INVENTION: Sugar Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5872232ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

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;; SOFTWARE: WordPerfect 5.1  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/471,973A  
;; FILING DATE: 06-JUN-1995  
;; CLASSIFICATION: 514  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 835,932  
;; FILING DATE: 05-MAR-1992  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Joseph Lucci  
;; REGISTRATION NUMBER: 33,307  
;; REFERENCE/DOCKET NUMBER: ISIS-2005  
;; TELEPHONE: 215-568-3100  
;; TELEFAX: 215-568-3439  
;; INFORMATION FOR SEQ ID NO: 19:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 21 bases  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; ANTI-SENSE: yes  
;; US-08-471-973A-19

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 130 CGGATGAAGAAGATCAACG 149  
||| ||||| |||||  
Db 21 CGCAAGAAGAAGCAACG 2

RESULT 92  
US-08-998-208-10  
; Sequence 10, Application US/08998208  
; Patent No. 5880105  
; GENERAL INFORMATION:  
; APPLICANT: Bergema, Derk J.  
; APPLICANT: Stambolian, Dwight  
; TITLE OF INVENTION: Human Galactokinase Gene  
; NUMBER OF SEQUENCES: 33  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: SmithKline Beecham Corp./Corporate  
; ADDRESSEE: Intellectual Property  
; STREET: 709 Swedeland Road/UW2220  
; CITY: King of Prussia  
; STATE: Pennsylvania  
; COUNTRY: USA  
; ZIP: 19406-0939  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/998,208  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/451,777  
; FILING DATE: 26-MAY-1995  
; APPLICATION NUMBER: PCT/US94/10825  
; FILING DATE: 23-SEP-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Eagle, Ailissa M.  
; REGISTRATION NUMBER: 37,126  
; REFERENCE/DOCKET NUMBER: P50268-1B  
; TELEPHONE: 610-270-5364  
; TELEFAX: 610-270-5090  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:

;; LENGTH: 21 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA (genomic)  
;; US-08-998-208-10

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 927 CCAGCTGCTCCGCTGGCTGG 946  
||||| ||||| |||||  
Db 2 CCAGCAGCTCCGCGACCTGG 21

RESULT 93  
US-08-465-880-23/c  
; Sequence 23, Application US/08465880  
; Patent No. 5955589  
; GENERAL INFORMATION:  
; APPLICANT: Philip Dan Cook  
; TITLE OF INVENTION: Gapped 2' Modified Oligonucleotides  
; NUMBER OF SEQUENCES: 28  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5955589ris  
; STREET: One Liberty Place - 46th Floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: U.S.A.  
; ZIP: 19103  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5 inch disk, 720 Kb  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: WordPerfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/465,880  
; FILING DATE: Herewith  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 244,993  
; FILING DATE: 21-JUN-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Joseph Lucci  
; REGISTRATION NUMBER: 33,307  
; REFERENCE/DOCKET NUMBER: ISIS-2002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215-568-3100  
; TELEFAX: 215-568-3439  
; INFORMATION FOR SEQ ID NO: 23:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 bases  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; ANTI-SENSE: yes  
; US-08-465-880-23  
  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 130 CGGATGAAGAAGATCAACG 149  
||| ||||| |||||  
Db 21 CGCAAGAAGAAGCAACG 2  
  
RESULT 94  
US-08-465-880-24/c  
; Sequence 24, Application US/08465880  
; Patent No. 5955589  
; GENERAL INFORMATION:

Tue Nov 2 13:39:13 2004

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; APPLICANT: Philip Dan Cook
; TITLE OF INVENTION: Gapped 2' Modified Oligonucleotides
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5955589ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,880
; FILING DATE: Herewith
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 244,993
; FILING DATE: 21-JUN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
; US-08-465-880-24

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 95
US-08-639A-36/c
; Sequence 36, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA
; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
; US-08-863-639A-50

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
; US-08-863-639A-36

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGTGGCGCAGT 249
Db 20 GTGGTGGTGGTGGTGGT 1

RESULT 96
US-08-863-639A-50/c
; Sequence 50, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA
; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
; US-08-863-639A-50

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

QY 231 TGGTGGTGGTGGCGGCGAGTG 250  
|||||  
Db 21 TGGTGGTGGTGGTGGTGGTG 2

RESULT 97  
US-08-863-639A-73  
; Sequence 73, Application US/08863639A  
; Patent No. 5981185  
; GENERAL INFORMATION:  
; APPLICANT: Matson, Robert S.  
; APPLICANT: Coassin, Peter J.  
; APPLICANT: Rampal, Jang B.  
; APPLICANT: Caskey, C. T.  
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS  
; NUMBER OF SEQUENCES: 95  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sheldon & Mak  
; STREET: 225 South Lake Avenue, 9th Floor  
; CITY: Pasadena  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 91101

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage  
; COMPUTER: IBM compatible  
; OPERATING SYSTEM: Windows 95  
; SOFTWARE: Corel WordPerfect 8 version  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/863,639A  
; FILING DATE: May 28, 1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Joseph E. Mueth  
; REGISTRATION NUMBER: 20,532  
; REFERENCE/DOCKET NUMBER: 11859-1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (626) 796-4000  
; TELEFAX: (626) 795-6321  
; INFORMATION FOR SEQ ID NO: 73:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: Other nucleic acid  
US-08-863-639A-73

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGCGGCGAGT 249  
|||||  
Db 2 GTGGTGGTGGTGGTGGTGGT 21

RESULT 98  
US-08-863-639A-88  
; Sequence 88, Application US/08863639A  
; Patent No. 5981185  
; GENERAL INFORMATION:  
; APPLICANT: Matson, Robert S.  
; APPLICANT: Coassin, Peter J.  
; APPLICANT: Rampal, Jang B.  
; APPLICANT: Caskey, C. T.  
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS  
; NUMBER OF SEQUENCES: 95  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Sheldon & Mak  
; STREET: 225 South Lake Avenue, 9th Floor  
; CITY: Pasadena  
; STATE: CA

COUNTRY: USA  
; ZIP: 91101  
COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage  
; COMPUTER: IBM compatible  
; OPERATING SYSTEM: Windows 95  
; SOFTWARE: Corel WordPerfect 8 version  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/863,639A  
; FILING DATE: May 28, 1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Joseph E. Mueth  
; REGISTRATION NUMBER: 20,532  
; REFERENCE/DOCKET NUMBER: 11859-1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (626) 796-4000  
; TELEFAX: (626) 795-6321  
; INFORMATION FOR SEQ ID NO: 88:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: Other nucleic acid  
US-08-863-639A-88

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 231 TGGTGGTGGTGGCGGCGAGTG 250  
|||||  
Db 1 TGGTGGTGGTGGTGGTGGTG 20

RESULT 99  
US-09-035-357-18/c  
; Sequence 18, Application US/09035357  
; Patent No. 6005087  
; GENERAL INFORMATION:  
; APPLICANT: Phillip Dan Cook  
; APPLICANT: A. Kawasaki  
; TITLE OF INVENTION: 2'-Modified Oligonucleotides  
; NUMBER OF SEQUENCES: 37  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6005087ris  
; STREET: One Liberty Place - 46th Floor  
; CITY: Philadelphia  
; STATE: PA  
; COUNTRY: U.S.A.  
; ZIP: 19103  
COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5 inch disk, 720 Kb  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: WordPerfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/035,357  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/469,037  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Joseph Lucci  
; REGISTRATION NUMBER: 33,307  
; REFERENCE/DOCKET NUMBER: ISIS-2004  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215-568-3100  
; TELEFAX: 215-568-3439  
; INFORMATION FOR SEQ ID NO: 18:  
; SEQUENCE CHARACTERISTICS: